

# **CAREERS** 360

## **PREPARATION** **Series**

# Inequality

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**All Questions with Solutions**

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**Q. 1** **Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following expression?

$$35 \text{ B } 2 \text{ A } 5 \text{ B } (40 \text{ C } 37) \text{ A } (8 \text{ B } 4) \text{ D } 16 \text{ C } 14 = ?$$

**Option 1:**

66

**Option 2:**

54

**Option 3:**

73

**Option 4:**

56

**Correct Answer:**

73

**Solution:**

**Given:**

$$35 \text{ B } 2 \text{ A } 5 \text{ B } (40 \text{ C } 37) \text{ A } (8 \text{ B } 4) \text{ D } 16 \text{ C } 14 = ?$$

On replacing the letters with the mathematical signs as per the instructions given in the question, we get –

$$= 35 \times 2 + 5 \times (40 - 37) + (8 \times 4) \div 16 - 14$$

$$= 35 \times 2 + 5 \times 3 + 32 \div 16 - 14$$

$$= 35 \times 2 + 5 \times 3 + 2 - 14$$

$$= 70 + 15 + 2 - 14$$

$$= 87 - 14 = 73$$

So, 73 is the required answer. Hence, the **third option** is correct.

**Q. 2**     **Directions:** Which two signs and two numbers (Not digits) should be interchanged in the given equation to make it correct?

$$9 \div 3 + 7 \times 4 - 5 = 20$$

**Option 1:**

$\div$  and  $-$ , 5 and 4

**Option 2:**

$\times$  and  $-$ , 3 and 5

**Option 3:**

$+$  and  $\times$ , 9 and 7

**Option 4:**

$\div$  and  $-$ , 7 and 5

**Correct Answer:**

+ and ×, 9 and 7

**Solution:**

**Given:**

$$9 \div 3 + 7 \times 4 - 5 = 20$$

Let's check the given options -

**First Option:** ÷ and -, 5 and 4

$$\Rightarrow 9 - 3 + 7 \times 5 \div 4 = 20$$

Solving the L.H.S. of the equation -

$$= 9 - 3 + 7 \times 1.25$$

$$= 9 - 3 + 8.75$$

$$= 14.75 \neq 20$$

**Second option:** × and -, 3 and 5

$$\Rightarrow 9 \div 5 + 7 - 4 \times 3 = 20$$

Solving the L.H.S. of the equation -

$$= 1.8 + 7 - 4 \times 3$$

$$= 1.8 + 7 - 12$$

$$= -3.2 \neq 20$$

**Third option:** + and ×, 9 and 7

$$\Rightarrow 7 \div 3 \times 9 + 4 - 5 = 20$$

Solving the L.H.S. of the equation -

$$= 21 + 4 - 5$$

$$= 20$$

**Fourth option:** ÷ and -, 7 and 5

$$\Rightarrow 9 - 3 + 5 \times 4 \div 7 = 20$$

Solving the L.H.S. of the equation -

$$\begin{aligned} &= 9 - 3 + 5 \times 0.57 \\ &= 9 - 3 + 2.85 \\ &= 8.85 \neq 20 \end{aligned}$$

So, only the third option satisfies the given equation. Hence, the **third option** is correct.

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**Q. 3**     **Directions:** If  $7 \# 3 \# 2 = 237$  and  $8 \# 4 \# 1 = 148$ , then  $3 \# 5 \# 4 = ?$

**Option 1:**  
355

**Option 2:**  
543

**Option 3:**  
453

**Option 4:**  
435

**Correct Answer:**  
453

**Solution:**

**Given:**

$$7 \# 3 \# 2 = 237 \text{ and } 8 \# 4 \# 1 = 148$$

Like,  $7 \# 3 \# 2 = 237$  → The numbers 7 and 2 exchange their positions. Specifically, the number 7 moves from the first position to the third position, while the number 2 moves from the third position to the first position. The number 3 remains unchanged and stays in the second position.

And,  $8 \# 4 \# 1 = 148$  → The numbers 8 and 1 exchange their positions. Specifically, the number 8 moves from the first position to the third position, while the number 1 moves from the third position to the first position. The number 4 remains unchanged and stays in the second position.

Similarly, for  $3 \# 5 \# 4 = 453$  → The numbers 3 and 4 will exchange their positions. Specifically, the number 3 will move from the first position to the third position, while the number 4 will move from the third position to the first position. The number 5 remains unchanged and stays in the second position.

So, 453 is the required answer to the given equation. Hence, the **third option** is correct.

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- Q. 4** **Directions:** What will come in the place of (?) in the following equation, if + and × are interchanged and also – and ÷ are interchanged?

$$20 \div 5 \times 10 - 5 + 2 = ?$$

**Option 1:**

4

**Option 2:**

19

**Option 3:**

12

**Option 4:**

2

**Correct Answer:**

19

**Solution:**

**Given:**

$$20 \div 5 \times 10 - 5 + 2 = ?$$

After interchanging the given mathematical signs, we get –

$$= 20 - 5 + 10 \div 5 \times 2$$

$$= 20 - 5 + 2 \times 2$$

$$= 20 - 5 + 4$$

$$= 19$$

So, 19 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 5**     **Directions:** By interchanging the given two numbers (not digits) which of the following equations will not be correct?  
4 and 6

**Option 1:**

$$2 + 6 \times 5 - 4 = 16$$

**Option 2:**

$$4 + 5 - 6 = 7$$

**Option 3:**

$$6 \div 2 - 4 \times 5 = -28$$

**Option 4:**

$$6 \times 3 - 4 \div 1 = 3$$

**Correct Answer:**

$$6 \times 3 - 4 \div 1 = 3$$

**Solution:**

Let's check the options -

**First option:**  $2 + 6 \times 5 - 4 = 16$

On interchanging the given numbers, the equation becomes -

$$\Rightarrow 2 + 4 \times 5 - 6 = 16$$

Solving the L.H.S. of the equation -

$$= 2 + 20 - 6$$

$$= 22 - 6$$

$$= 16$$

**Second option:**  $4 + 5 - 6 = 7$

On interchanging the given numbers, the equation becomes -

$$\Rightarrow 6 + 5 - 4 = 7$$

Solving the L.H.S. of the equation -

$$= 11 - 4$$

$$= 7$$

**Third option:**  $6 \div 2 - 4 \times 5 = -28$

On interchanging the given numbers, the equation becomes -

$$\Rightarrow 4 \div 2 - 6 \times 5 = -28$$

Solving the L.H.S. of the equation -

$$= 2 - 6 \times 5$$

$$= 2 - 30$$

$$= -28$$

**Fourth option:**  $6 \times 3 - 4 \div 1 = 3$

On interchanging the given numbers, the equation becomes -

$$\Rightarrow 4 \times 3 - 6 \div 1 = 3$$

Solving the L.H.S. of the equation -

$$= 4 \times 3 - 6$$

$$= 12 - 6$$

$$= 6 \neq 3$$

So, only the equation in the fourth option does not satisfy the R.H.S. of the given equation. Hence the **fourth option** is correct.

**Q. 6** **Directions:** If + means  $\times$ , - means  $\div$ ,  $\div$  means + and  $\times$  means -, then  $74 \div 11 - 33 + 42 \times 16 = ?$

**Option 1:**

64

**Option 2:**

68

**Option 3:**

76

**Option 4:**

72

**Correct Answer:**

72

**Solution:**

**Given:**

$$74 \div 11 - 33 + 42 \times 16 = ?$$

After interchanging the mathematical signs, we get -

$$= 74 + 11 \div 33 \times 42 - 16$$

$$= 74 + 14 - 16$$

$$= 88 - 16$$

$$= 72$$

So, 72 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 7**     **Directions:** After interchanging the given two signs what will be the values of equations (I) and (II) respectively?

× and +

I.  $5 \times 12 - 15 + 20 \div 25$

II.  $36 + 3 \times 2 - 15 \div 5$

**Option 1:**

17 and 35

**Option 2:**

50 and 55

**Option 3:**

5 and 107

**Option 4:**

10 and 100

**Correct Answer:**

5 and 107

**Solution:**

**Given:**

I.  $5 \times 12 - 15 + 20 \div 25$

II.  $36 + 3 \times 2 - 15 \div 5$

**Equation I:**  $5 \times 12 - 15 + 20 \div 25$

On interchanging the mathematical signs, we get -

$$= 5 + 12 - 15 \times 20 \div 25$$

$$= 5 + 12 - 12$$

$$= 17 - 12$$

$$= 5$$

**Equation II:**  $36 + 3 \times 2 - 15 \div 5$

On interchanging the mathematical signs, we get -

$$= 36 \times 3 + 2 - 15 \div 5$$

$$= 36 \times 3 + 2 - 3$$

$$= 108 + 2 - 3$$

$$= 110 - 3$$

$$= 107$$

So, the values of equations (I) and (II) are 5 and 107. Hence, the **third option** is correct.

**Q. 8** **Directions:** Which two numbers (not digits) should be interchanged to make the given equation correct?

$$5 - 6 \div 3 \times 9 + 1 = 0$$

**Option 1:**

1 and 0

**Option 2:**

6 and 9

**Option 3:**

5 and 9

**Option 4:**

6 and 3

**Correct Answer:**

5 and 9

**Solution:**

**Given:**

$$5 - 6 \div 3 \times 9 + 1 = 0$$

Let's check the options -

**First option:** 1 and 0

$$5 - 6 \div 3 \times 9 + 1 = 0$$

On interchanging the numbers, we get -

$$\Rightarrow 5 - 6 \div 3 \times 9 + 0 = 1$$

$$\Rightarrow 5 - 2 \times 9 + 0 = 1$$

$$\Rightarrow 5 - 18 + 0 = 1$$

$$\Rightarrow -13 \neq 1$$

**Second option:** 6 and 9

$$5 - 6 \div 3 \times 9 + 1 = 0$$

On interchanging the numbers, we get -

$$\Rightarrow 5 - 9 \div 3 \times 6 + 1 = 0$$

$$\Rightarrow 5 - 3 \times 6 + 1 = 0$$

$$\Rightarrow 5 - 18 + 1 = 0$$

$$\Rightarrow -12 \neq 0$$

**Third option:** 5 and 9

$$5 - 6 \div 3 \times 9 + 1 = 0$$

On interchanging the numbers, we get -

$$\Rightarrow 9 - 6 \div 3 \times 5 + 1 = 0$$

$$\Rightarrow 9 - 2 \times 5 + 1 = 0$$

$$\Rightarrow 9 - 10 + 1 = 0$$

$$\Rightarrow 0$$

**Fourth option:** 6 and 3

$$5 - 6 \div 3 \times 9 + 1 = 0$$

On interchanging the numbers, we get -

$$\Rightarrow 5 - 3 \div 6 \times 9 + 1 = 0$$

$$\Rightarrow 5 - 0.5 \times 9 + 1 = 0$$

$$\Rightarrow 5 - 4.5 + 1 = 0$$

$$\Rightarrow 1.5 \neq 0$$

Here, only the third option satisfies the equation. Hence, the **third option** is correct.

**Q. 9**      **Directions:** By interchanging which two signs the given equation will be correct?

$$39 - 3 \div 13 + 16 \times 8 = 17$$

**Option 1:**

× and -

**Option 2:**

+ and -

**Option 3:**

÷ and -

**Option 4:**

× and ÷

**Correct Answer:**

× and -

**Solution:**

**Given:**

$$39 - 3 \div 13 + 16 \times 8 = 17$$

Let's check the options -

**First option:** × and -

$$39 - 3 \div 13 + 16 \times 8 = 17$$

On interchanging the mathematical signs, we get -

$$\Rightarrow 39 \times 3 \div 13 + 16 - 8 = 17$$

$$\Rightarrow 9 + 16 - 8$$

$$\Rightarrow 25 - 8$$

$$\Rightarrow 17$$

**Second option:** + and -

$$39 - 3 \div 13 + 16 \times 8 = 17$$

On interchanging the mathematical signs, we get -

$$\Rightarrow 39 + 3 \div 13 - 16 \times 8 = 17$$

$$\Rightarrow 39 + 0.23 - 16 \times 8$$

$$\Rightarrow 39 + 0.23 - 128$$

$$\Rightarrow - 88.77 \neq 17$$

**Third option:**  $\div$  and  $-$

$$39 - 3 \div 13 + 16 \times 8 = 17$$

On interchanging the mathematical signs, we get  $-$

$$\Rightarrow 39 \div 3 - 13 + 16 \times 8 = 17$$

$$\Rightarrow 13 - 13 + 16 \times 8$$

$$\Rightarrow 13 - 13 + 128$$

$$\Rightarrow 128 \neq 17$$

**Fourth option:**  $\times$  and  $\div$

$$39 - 3 \div 13 + 16 \times 8 = 17$$

On interchanging the mathematical signs, we get  $-$

$$\Rightarrow 39 - 3 \times 13 + 16 \div 8 = 17$$

$$\Rightarrow 39 - 3 \times 13 + 2$$

$$\Rightarrow 39 - 39 + 2$$

$$\Rightarrow 2 \neq 17$$

Here, only the first option satisfies the R.H.S. of the equation. Hence, the **first option** is correct.

**Q. 10** **Directions:** If  $\times$  means  $\div$ ,  $-$  means  $+$ ,  $\div$  means  $\times$  and  $+$  means  $-$ , then  $84 \times 7 \div 4 - 16 \times 8 \div 2 + 14 = ?$

**Option 1:**

36

**Option 2:**

38

**Option 3:**

44

**Option 4:**

24

**Correct Answer:**

38

**Solution:**

**Given:**

× means ÷, – means +, ÷ means × and + means –

$$84 \times 7 \div 4 - 16 \times 8 \div 2 + 14 = ?$$

After interchanging the given mathematical signs, we get –

$$\Rightarrow 84 \div 7 \times 4 + 16 \div 8 \times 2 - 14$$

$$\Rightarrow 12 \times 4 + 2 \times 2 - 14$$

$$\Rightarrow 48 + 4 - 14$$

$$\Rightarrow 38$$

So, 38 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 11** **Directions:** After interchanging the given two numbers (Not digits) what will be the values of expression (I) and (II) respectively?

6 and 9

I.  $9 \div 3 \times 4 - 6 + 5$

II.  $9 + 3 \div 2 \times 4 - 6$

**Option 1:**

4 and 3

**Option 2:**

10 and 9

**Option 3:**

9 and 10

**Option 4:**

3 and 4

**Correct Answer:**

4 and 3

**Solution:**

**Given:**

I.  $9 \div 3 \times 4 - 6 + 5$

II.  $9 + 3 \div 2 \times 4 - 6$

On interchanging the numbers in the given equation, we get –

**Equation I.**  $6 \div 3 \times 4 - 9 + 5$

$$= 2 \times 4 - 9 + 5$$

$$= 8 - 9 + 5$$

$$= 13 - 9$$

$$= 4$$

**Equation II.**  $6 + 3 \div 2 \times 4 - 9$

$$= 6 + 1.5 \times 4 - 9$$

$$= 6 + 6 - 9$$

$$= 12 - 9$$

$$= 3$$

Hence, the **first option** is correct.

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**Q. 12** **Directions:** What will come in the place of (?) in the following equation, if  $\times$  and  $-$  are interchanged and also  $+$  and  $\div$  are interchanged?

$$12 + 4 - 2 \times 5 \div 4 = ?$$

**Option 1:**

6

**Option 2:**

5

**Option 3:**

3

**Option 4:**

4

**Correct Answer:**

5

**Solution:**

**Given:**

$$12 + 4 - 2 \times 5 \div 4 = ?$$

On interchanging the mathematical signs, we get –

$$12 \div 4 \times 2 - 5 + 4 = ?$$

$$= 3 \times 2 - 5 + 4$$

$$= 6 - 5 + 4$$

$$= 10 - 5$$

$$= 5$$

Hence, the **second option** is correct.

**Q. 13** **Directions:** If A means +, B means –, C means ÷ and D means ×, then  $63 \text{ C } 9 \text{ A } 16 \text{ B } 32 \text{ D } 3 \text{ C } 8 = ?$

**Option 1:**

11

**Option 2:**

13

**Option 3:**

10

**Option 4:**

9

**Correct Answer:**

11

**Solution:**

**Given:**

63 C 9 A 16 B 32 D 3 C 8 = ?

On replacing the alphabet with the symbols, we get -

$$= 63 \div 9 + 16 - 32 \times 3 \div 8$$

$$= 7 + 16 - 12$$

$$= 23 - 12$$

$$= 11$$

Hence, the **first option** is correct.

**Q. 14** **Directions:** After interchanging the given two numbers (not digits), what will be the value of the given equation?

13 and 11

$$48 \div 6 + 9 - 11 \times 11 + 13$$

**Option 1:**

-121

**Option 2:**

-113

**Option 3:**

-141

**Option 4:**

-137

**Correct Answer:**

-141

**Solution:**

**Given:**

$$48 \div 6 + 9 - 11 \times 11 + 13$$

On interchanging the numbers, we get -

$$= 48 \div 6 + 9 - 13 \times 13 + 11$$

$$= 8 + 9 - 13 \times 13 + 11$$

$$= 8 + 9 - 169 + 11$$

$$= 28 - 169$$

$$= -141$$

Hence, the **third option** is correct.

**Q. 15** **Directions:** If P means  $\times$ , Q means  $+$ , R means  $\div$ , and S means  $-$ , then  $56 R 8 Q 13 S 42 R 21 P 5 = ?$

**Option 1:**

12

**Option 2:**

8

**Option 3:**

24

**Option 4:**

10

**Correct Answer:**

10

**Solution:**

**Given:**

$$56 R 8 Q 13 S 42 R 21 P 5 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 56 \div 8 + 13 - 42 \div 21 \times 5$$

$$= 7 + 13 - 2 \times 5$$

$$= 7 + 13 - 10$$

$$= 10$$

So, 10 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 16** **Directions:** Which two signs and two numbers interchange (not digits) that will make the equation correct?

$$7 - 5 \times 2 + 8 \div 4 = 17$$

**Option 1:**

- and  $\div$ , 8 and 5

**Option 2:**

$\times$  and  $\div$ , 5 and 4

**Option 3:**

+ and -, 4 and 5

**Option 4:**

+ and -, 7 and 5

**Correct Answer:**

+ and -, 7 and 5

**Solution:**

**Given:**

$$7 - 5 \times 2 + 8 \div 4 = 17$$

Replace the given symbols and numbers in the options one by one with the original symbols and numbers in the given equation.

Let's check the given options –

**First option:** – and  $\div$ , 8 and 5

$$7 - 5 \times 2 + 8 \div 4 = 17$$

$$\Rightarrow 7 \div 8 \times 2 + 5 - 4$$

$$\Rightarrow 0.875 \times 2 + 5 - 4$$

$$\Rightarrow 1.75 + 5 - 4$$

$$\Rightarrow 2.75 \neq 17$$

**Second option:**  $\times$  and  $\div$ , 5 and 4

$$7 - 5 \times 2 + 8 \div 4 = 17$$

$$\Rightarrow 7 - 4 \div 2 + 8 \times 5$$

$$\Rightarrow 7 - 2 + 8 \times 5$$

$$\Rightarrow 7 - 2 + 40$$

$$\Rightarrow 45 \neq 17$$

**Third option:** + and –, 4 and 5

$$7 - 5 \times 2 + 8 \div 4 = 17$$

$$\Rightarrow 7 + 4 \times 2 - 8 \div 5$$

$$\Rightarrow 7 + 4 \times 2 - 1.6$$

$$\Rightarrow 7 + 8 - 1.6$$

$$\Rightarrow 13.4 \neq 17$$

**Fourth option:** + and –, 7 and 5

$$7 - 5 \times 2 + 8 \div 4 = 17$$

$$\Rightarrow 5 + 7 \times 2 - 8 \div 4$$

$$\Rightarrow 5 + 7 \times 2 - 2$$

$$\Rightarrow 5 + 14 - 2$$

$$\Rightarrow 19 - 2$$

$$\Rightarrow 17$$

Here, the fourth option satisfies the equation. Hence the **fourth option** is correct.

**Q. 17** **Directions:** After interchanging the given two numbers (not digits), what will be the value of the given equation?

14 and 21

$$21 \div 14 \times 3 + 48 - 37$$

*Option 1:*

13

*Option 2:*

21

*Option 3:*

19

*Option 4:*

32

**Correct Answer:**

13

**Solution:**

**Given:**

$$21 \div 14 \times 3 + 48 - 37$$

On interchanging 14 and 21 in the equation, we get –

$$= 14 \div 21 \times 3 + 48 - 37$$

$$= 2 + 48 - 37$$

$$= 50 - 37$$

$$= 13$$

Therefore, 13 is the required answer for the given equation. Hence, the **first option** is correct.

**Q. 18**    **Directions:** If  $617 @ 342 = 572$  and  $483 @ 342 = 141$ , then  $280 @ 82 = ?$

**Option 1:**

632

**Option 2:**

891

**Option 3:**

188

**Option 4:**

721

**Correct Answer:**

891

**Solution:**

**Given:**

$$617 @ 342 = 572; 483 @ 342 = 141$$

**Equation I:**  $617 @ 342 = 572$

$617 - 342 = 275$ ; On reversing the order of digits of 275, we get 572.

**Equation II:**  $483 @ 342 = 141$

$483 - 342 = 141$ ; On reversing the order of digits of 141 we get 141.

Similarly, for **Equation III:**  $280 @ 82 = ?$

$280 - 82 = 198$ ; On reversing the order of digits of 198, we get 891.

Hence, the **second option** is correct.

- Q. 19**     **Directions:** If A means  $\times$ , B means  $+$ , C means  $-$ , and D means  $\div$ , then  
 $66 A 3 D 11 B 43 C 48 D 12 = ?$

**Option 1:**

57

**Option 2:**

47

**Option 3:**

43

**Option 4:**

61

**Correct Answer:**

57

**Solution:**

**Given:**

$$66 \text{ A } 3 \text{ D } 11 \text{ B } 43 \text{ C } 48 \text{ D } 12 = ?$$

After replacing the letters with the mathematical signs, we get -

$$= 66 \times 3 \div 11 + 43 - 48 \div 12$$

$$= 18 + 43 - 4$$

$$= 61 - 4$$

$$= 57$$

So, 57 is the answer to the given equation. Hence, the **first option** is correct.

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**Q. 20** **Directions:** After interchanging the given two numbers (not digits) what will be the values of expression (I) and (II) respectively?

6 and 4

I.  $10 \times 6 - 30 \div 4 + 20$

II.  $8 - 4 \times 5 + 6 \div 2$

**Option 1:**

12 and -6

**Option 2:**

20 and 55

**Option 3:**

55 and -20

**Option 4:**

10 and -6

**Correct Answer:**

55 and -20

**Solution:**

**Given:**

I.  $10 \times 6 - 30 \div 4 + 20$

II.  $8 - 4 \times 5 + 6 \div 2$

Let's solve each equation after interchanging the numbers according to the instructions.

On interchanging the numbers 6 and 4 in the first equation, we get -

$$= 10 \times 4 - 30 \div 6 + 20$$

$$= 10 \times 4 - 5 + 20$$

$$= 40 - 5 + 20$$

$$= 55$$

On interchanging the numbers 6 and 4 in the second equation, we get -

$$= 8 - 6 \times 5 + 4 \div 2$$

$$= 8 - 6 \times 5 + 2$$

$$= 8 - 30 + 2$$

$$= -20$$

Therefore, after solving the given equations the required answer is 55 and -20. Hence, the **third option** is correct.

**Q. 21** **Directions:** Which two signs and two numbers (Not digits) of the equation should be interchanged to make it correct?

$$13 \times 12 \div 36 + 11 - 7 = 35$$

**Option 1:**

+ and  $\times$ , 36 and 7

**Option 2:**

+ and -, 12 and 7

**Option 3:**

$\times$  and  $\div$ , 13 and 36

**Option 4:**

$\times$  and  $\div$ , 11 and 7

**Correct Answer:**

$\times$  and  $\div$ , 11 and 7

**Solution:**

**Given:**

$$13 \times 12 \div 36 + 11 - 7 = 35$$

Let's check the given options –

**First option:** + and ×, 36 and 7

$$13 \times 12 \div 36 + 11 - 7 = 35$$

On interchanging the mathematical signs and numbers, we get –

$$= 13 + 12 \div 7 \times 11 - 36$$

$$= 13 + 1.71 \times 11 - 36$$

$$= 13 + 18.81 - 36$$

$$= 31.81 - 36$$

$$= -4.19 \neq 35$$

**Second option:** + and –, 12 and 7

$$13 \times 12 \div 36 + 11 - 7 = 35$$

On interchanging the mathematical signs and numbers, we get –

$$= 13 \times 7 \div 36 - 11 + 12$$

$$= 13 \times 0.19 - 11 + 12$$

$$= 2.47 - 11 + 12$$

$$= 3.47 \neq 35$$

**Third option:** × and ÷, 13 and 36

$$13 \times 12 \div 36 + 11 - 7 = 35$$

On interchanging the mathematical signs and numbers, we get –

$$= 36 \div 12 \times 13 + 11 - 7$$

$$= 3 \times 13 + 11 - 7$$

$$= 39 + 11 - 7$$

$$= 50 - 7$$

$$= 43 \neq 35$$

**Fourth option:** × and ÷, 11 and 7

$$13 \times 12 \div 36 + 11 - 7 = 35$$

On interchanging the mathematical signs and numbers, we get –

$$= 13 \div 12 \times 36 + 7 - 11$$

$$\begin{aligned} &= 39 + 7 - 11 \\ &= 46 - 11 \\ &= 35 \end{aligned}$$

So, the fourth option satisfies the R.H.S. of the equation. Hence, the **fourth option** is correct.

**Q. 22**    **Directions:** By interchanging the given two numbers (Not digits) which of the following equations will be correct?

5 and 9

I.  $7 \times 9 + 5 - 8 \div 4 = 42$

II.  $9 \times 3 + 5 \div 1 - 4 = 20$

**Option 1:**

Neither I nor II

**Option 2:**

Both I and II

**Option 3:**

Only I

**Option 4:**

Only II

**Correct Answer:**

Both I and II

**Solution:**

**Given:**

$$7 \times 9 + 5 - 8 \div 4 = 42$$

$$9 \times 3 + 5 \div 1 - 4 = 20$$

**Equation I:**

$$7 \times 9 + 5 - 8 \div 4 = 42$$

After interchanging 5 and 9, the equation becomes –

$$\Rightarrow 7 \times 5 + 9 - 8 \div 4 = 42$$

Solving the L.H.S. of the equation –

$$\Rightarrow 7 \times 5 + 9 - 2$$

$$\Rightarrow 35 + 9 - 2$$

$$\Rightarrow 44 - 2$$

$$\Rightarrow 42 = \text{R.H.S.}$$

**Equation II:**

$$9 \times 3 + 5 \div 1 - 4 = 20$$

After interchanging 5 and 9, the equation becomes –

$$\Rightarrow 5 \times 3 + 9 \div 1 - 4 = 20$$

Solving the L.H.S. of the equation –

$$\Rightarrow 5 \times 3 + 9 - 4$$

$$\Rightarrow 15 + 9 - 4$$

$$\Rightarrow 24 - 4$$

$$\Rightarrow 20 = \text{R.H.S.}$$

So, both the equations satisfy the R.H.S. of the given equations. Hence, the **second option** is correct.

**Q. 23** **Directions:** Select the correct combination of mathematical signs to sequentially replace the \* signs and balance the given equation.

$$33 * 4 * 15 * 3 * 61 = 188$$

**Option 1:**

$+, \times, \div, -$

**Option 2:**

$\times, -, \div, +$

**Option 3:**

$+, -, \div, \times$

**Option 4:**

$\div, \times, -, +$

**Correct Answer:**

$\times, -, \div, +$

**Solution:**

**Given:**

$$33 * 4 * 15 * 3 * 61 = 188$$

Replace \* with the mathematical signs and solve the equations one by one using the BODMAS.

**First option:**  $+, \times, \div, -$

$$33 + 4 \times 15 \div 3 - 61 = 188$$

Solving the L.H.S. of the equation –

$$= 33 + 4 \times 5 - 61$$

$$= 33 + 20 - 61$$

$$\Rightarrow -8 \neq 188$$

**Second option:**  $\times, -, \div, +$

$$33 \times 4 - 15 \div 3 + 61$$

Solving the L.H.S. of the equation –

$$= 33 \times 4 - 5 + 61$$

$$= 132 - 5 + 61$$

$$\Rightarrow 188 = \text{R.H.S.}$$

**Third option:**  $+, -, \div, \times$

$$33 + 4 - 15 \div 3 \times 61$$

Solving the L.H.S. of the equation –

$$= 33 + 4 - 5 \times 61$$

$$= 37 - 305$$

$$\Rightarrow -268 \neq 188$$

**Fourth option:**  $\div, \times, -, +$

$$33 \div 4 \times 15 - 3 + 61$$

Solving the L.H.S. of the equation –

$$= 8.25 \times 15 - 3 + 61$$

$$= 123.75 - 3 + 61$$

$$\Rightarrow 181.75 \neq 188$$

So, only the second option satisfies the given equation. Hence, the **second option** is correct.

**Q. 24** **Directions:** If + means −, − means ×, × means ÷, and ÷ means +, what will be the value of the following expression?

$$45 \times 9 \div 12 - 5 + 3 = ?$$

**Option 1:**

34

**Option 2:**

27

**Option 3:**

36

**Option 4:**

62

**Correct Answer:**

62

**Solution:**

**Given:**

$$45 \times 9 \div 12 - 5 + 3 = ?$$

After interchanging the given mathematical signs, we get –

$$\Rightarrow 45 \div 9 + 12 \times 5 - 3$$

$$\Rightarrow 5 + 12 \times 5 - 3$$

$$\Rightarrow 5 + 60 - 3$$

$$\Rightarrow 62$$

So, 62 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 25** **Directions:** If + means -, - means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means +, what will be the value of the following expression?

$$5 \div 5 + 5 - 10 \times 10 = ?$$

**Option 1:**

15

**Option 2:**

4

**Option 3:**

5

**Option 4:**

10

**Correct Answer:**

5

**Solution:**

**Given:**

$$5 \div 5 + 5 - 10 \times 10 = ?$$

On interchanging the signs given in the equation, the equation becomes -

$$= 5 + 5 - 5 \times 10 \div 10$$

$$= 5 + 5 - 5 \times 1$$

$$= 5 + 5 - 5$$

$$= 10 - 5$$

$$= 5$$

Hence, the **third option** is correct.

**Q. 26** **Directions:** Select the correct combination of mathematical signs to sequentially replace the \* signs and balance the given equation.

$$21 * 3 * 36 * 2 * 23 = 68$$

**Option 1:**

$$\div, -, \times, +$$

**Option 2:**

$$\div, \times, +, -$$

**Option 3:**

$$+, \times, -, \div$$

**Option 4:**

$\times, -, \div, +$

**Correct Answer:**

$\times, -, \div, +$

**Solution:**

**Given:**

$$21 * 3 * 36 * 2 * 23 = 68$$

Let's check the given options -

**First option:**  $\div, -, \times, +$

$$\Rightarrow 21 \div 3 - 36 \times 2 + 23 = 68$$

Solving the L.H.S. of the equation -

$$= 7 - 36 \times 2 + 23$$

$$= 7 - 72 + 23$$

$$= -42 \neq 68$$

**Second option:**  $\div, \times, +, -$

$$\Rightarrow 21 \div 3 \times 36 + 2 - 23 = 68$$

Solving the L.H.S. of the equation -

$$= 7 \times 36 + 2 - 23$$

$$= 252 + 2 - 23$$

$$= 231 \neq 68$$

**Third option:**  $+, \times, -, \div$

$$\Rightarrow 21 + 3 \times 36 - 2 \div 23 = 68$$

Solving the L.H.S. of the equation -

$$= 21 + 3 \times 36 - 0.09$$

$$= 21 + 108 - 0.09$$

$$= 128.91 \neq 68$$

**Fourth option:**  $\times, -, \div, +$

$$\Rightarrow 21 \times 3 - 36 \div 2 + 23 = 68$$

Solving the L.H.S. of the equation –

$$= 21 \times 3 - 18 + 23$$

$$= 63 - 18 + 23$$

$$= 68$$

So, only the fourth option satisfies the given equation. Hence, the **fourth option** is correct.

---

**Q. 27** **Directions:** If  $\div$  means  $-$ ,  $-$  means  $\times$ ,  $\times$  means  $+$ ,  $+$  means  $\div$ , what will come in place of the question mark (?)?

$$77 \div 7 \times 17 - 49 + 7 = ?$$

**Option 1:**

189

**Option 2:**

119

**Option 3:**

145

**Option 4:**

169

**Correct Answer:**

189

**Solution:**

**Given:**

$\div$  means  $-$ ,  $-$  means  $\times$ ,  $\times$  means  $+$ ,  $+$  means  $\div$

$$77 \div 7 \times 17 - 49 + 7 = ?$$

After interchanging the given mathematical signs, we get  $-$

$$\Rightarrow 77 - 7 + 17 \times 49 \div 7$$

$$\Rightarrow 77 - 7 + 17 \times 7$$

$$\Rightarrow 77 - 7 + 119$$

$$\Rightarrow 189$$

So, 189 is the answer to the given equation. Hence, the **first option** is correct.

---

**Q. 28** **Directions:** If  $+$  means  $-$ ,  $-$  means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means  $+$ , what will be the value of the following expression?

$$3 \div 6 + 3 - 4 \times 4 = ?$$

**Option 1:**

8

**Option 2:**

5

**Option 3:**

6

**Option 4:**

4

**Correct Answer:**

6

**Solution:**

**Given:**

+ means -, - means ×, × means ÷, and ÷ means +.

$$3 \div 6 + 3 - 4 \times 4 = ?$$

On interchanging the mathematical signs, we get -

$$= 3 + 6 - 3 \times 4 \div 4$$

$$= 3 + 6 - 3 \times 1$$

$$= 3 + 6 - 3$$

$$= 6$$

So, 6 is the answer to the given equation. Hence, the **third option** is correct.

**Q. 29**

**Directions:** If × means +, ÷ means ×, - means ÷, and + means -, then what will be the value of the following expression?

$$32 \times 6 + 10 - 4 \div 8 = ?$$

**Option 1:**

18

**Option 2:**

20

**Option 3:**

22

**Option 4:**

24

**Correct Answer:**

18

**Solution:**

**Given:**

$$32 \times 6 + 10 - 4 \div 8 = ?$$

On interchanging the mathematical signs, we get -

$$= 32 + 6 - 10 \div 4 \times 8$$

$$= 32 + 6 - 2.5 \times 8$$

$$= 32 + 6 - 20$$

$$= 18$$

Hence, the **first option** is correct.

**Q. 30** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $50 \text{ A } 86 \text{ C } 40 \text{ D } 10 \text{ B } 5 = ?$

**Option 1:**  
124

**Option 2:**  
150

**Option 3:**  
116

**Option 4:**  
134

**Correct Answer:**  
116

**Solution:**

**Given:**

$$50 \text{ A } 86 \text{ C } 40 \text{ D } 10 \text{ B } 5 = ?$$

On interchanging the mathematical signs, we get –

$$= 50 + 86 - 40 \div 10 \times 5$$

$$= 50 + 86 - 4 \times 5$$

$$= 136 - 20$$

$$= 116$$

Hence, the **third option** is correct.

**Q. 31** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $25 \text{ C } 21 \text{ D } 7 \text{ B } 3 \text{ A } 4 = ?$

**Option 1:**

20

**Option 2:**

21

**Option 3:**

24

**Option 4:**

43

**Correct Answer:**

20

**Solution:**

**Given:**

$$25 \text{ C } 21 \text{ D } 7 \text{ B } 3 \text{ A } 4 = ?$$

After replacing the letters with the mathematical signs, we get –

$$\Rightarrow 25 - 21 \div 7 \times 3 + 4$$

$$\Rightarrow 25 - 3 \times 3 + 4$$

$$\Rightarrow 25 - 9 + 4$$

$$\Rightarrow 20$$

So, 20 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 32**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?

$$27 \text{ B } 5 \text{ C } 38 \text{ A } 16 \text{ D } 4 \text{ A } 42 \text{ C } 8 \text{ B } 4 = ?$$

**Option 1:**

130

**Option 2:**

120

**Option 3:**

111

**Option 4:**

109

**Correct Answer:**

111

**Solution:**

**Given:**

$$27 B 5 C 38 A 16 D 4 A 42 C 8 B 4 = ?$$

After replacing the letters with the mathematical signs, we get -

$$\Rightarrow 27 \times 5 - 38 + 16 \div 4 + 42 - 8 \times 4$$

$$\Rightarrow 27 \times 5 - 38 + 4 + 42 - 8 \times 4$$

$$\Rightarrow 135 - 38 + 4 + 42 - 32$$

$$\Rightarrow 181 - 70$$

$$\Rightarrow 111$$

So, 111 is the answer to the given equation. Hence, the **third option** is correct.

**Q. 33** **Directions:** If M denotes -, N denotes  $\div$ , O denotes  $\times$ , and P denotes +, then what will come in place of (?) in the following equation?

$$324 P 35 M 184 M 17 O 3 P 39 = ?$$

**Option 1:**

163

**Option 2:**

171

**Option 3:**

159

**Option 4:**

153

**Correct Answer:**

163

**Solution:**

**Given:**

$$324 P 35 M 184 M 17 O 3 P 39 = ?$$

After replacing the letters with the mathematical signs, we get -

$$\Rightarrow 324 + 35 - 184 - 17 \times 3 + 39$$

$$\Rightarrow 324 + 35 - 184 - 51 + 39$$

$$\Rightarrow 398 - 235$$

$$\Rightarrow 163$$

So, 163 is the answer to the given equation. Hence, the **first option** is correct.

---

**Q. 34** **Directions:** If  $\times$  means  $+$ ,  $\div$  means  $-$ ,  $+$  means  $\times$ , and  $-$  means  $\div$ , what will come in place of the question mark (?) in the given expression?

$$182 - 13 \times 5 + 16 \div 44 = ?$$

**Option 1:**

50

**Option 2:**

62

**Option 3:**

86

**Option 4:**

48

**Correct Answer:**

50

**Solution:**

**Given:**

$$182 - 13 \times 5 + 16 \div 44 = ?$$

On interchanging the mathematical signs, we get -

$$= 182 \div 13 + 5 \times 16 - 44$$

$$= 14 + 5 \times 16 - 44$$

$$= 14 + 80 - 44$$

$$= 94 - 44$$

$$= 50$$

Hence, the **first option** is correct.

**Q. 35** **Directions:** If I denotes  $\div$ , J denotes  $\times$ , K denotes  $-$ , and L denotes  $+$ , then what will come in place of (?) in the following equation?

$$448 \text{ I } 8 \text{ L } 17 \text{ K } 12 \text{ J } 6 \text{ L } 19 = ?$$

**Option 1:**

14

**Option 2:**

20

**Option 3:**

16

**Option 4:**

18

**Correct Answer:**

20

**Solution:**

**Given:**

$$448 \text{ I } 8 \text{ L } 17 \text{ K } 12 \text{ J } 6 \text{ L } 19 = ?$$

After replacing the letters with the mathematical signs, we get:

$$\Rightarrow 448 \div 8 + 17 - 12 \times 6 + 19$$

$$\Rightarrow 56 + 17 - 12 \times 6 + 19$$

$$\Rightarrow 56 + 17 - 72 + 19$$

$$\Rightarrow 92 - 72$$

$$\Rightarrow 20$$

So, 20 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 36** **Directions:** If  $\times$  means  $-$ ,  $\div$  means  $+$ ,  $-$  means  $\div$ , and  $+$  means  $\times$ , then what will be the value of the following expression?

$$125 - 25 \div 4 + 25 \times 4 + 10 = ?$$

**Option 1:**

68

**Option 2:**

62

**Option 3:**

70

**Option 4:**

65

**Correct Answer:**

65

**Solution:**

**Given:**

$$125 - 25 \div 4 + 25 \times 4 + 10 = ?$$

On interchanging the mathematical signs, we get –

$$= 125 \div 25 + 4 \times 25 - 4 \times 10$$

$$= 5 + 4 \times 25 - 4 \times 10$$

$$= 5 + 100 - 40$$

$$= 65$$

Hence, the **fourth option** is correct.

**Q. 37** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$90 \text{ C } 20 \text{ B } 1 \text{ A } 36 \text{ D } 2 = ?$$

**Option 1:**

88

**Option 2:**

38

**Option 3:**

78

**Option 4:**

86

**Correct Answer:**

88

**Solution:**

**Given:**

A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$   
 $90\ C\ 20\ B\ 1\ A\ 36\ D\ 2 = ?$

After replacing the letters with the mathematical signs, we get -  
 $= 90 - 20 \times 1 + 36 \div 2$   
 $= 90 - 20 \times 1 + 18$   
 $= 90 - 20 + 18$   
 $= 88$

So, 88 is the answer to the given equation. Hence, the **first option** is correct.

---

**Q. 38**     **Directions:** Which of the following interchanges of signs would make the given equation correct?

$$5 - 4 \div 2 + 7 \times 3 = 14$$

**Option 1:**

$\div$  and  $+$

**Option 2:**

$\times$  and  $-$

**Option 3:**

– and ÷

**Option 4:**

+ and ×

**Correct Answer:**

× and –

**Solution:**

**Given:**

$$5 - 4 \div 2 + 7 \times 3 = 14$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

Let's check the options –

**First option:** ÷ and +

$$5 - 4 \div 2 + 7 \times 3 = 14$$

$$\Rightarrow 5 - 4 + 2 \div 7 \times 3$$

$$\Rightarrow 5 - 4 + 0.28 \times 3$$

$$\Rightarrow 5 - 4 + 0.84$$

$$\Rightarrow 1.84 \neq 14$$

**Second option:** × and –

$$5 - 4 \div 2 + 7 \times 3 = 14$$

$$\Rightarrow 5 \times 4 \div 2 + 7 - 3$$

$$\Rightarrow 5 \times 2 + 7 - 3$$

$$\Rightarrow 10 + 7 - 3$$

$$\Rightarrow 14$$

**Third option:** – and ÷

$$5 - 4 \div 2 + 7 \times 3 = 14$$

$$\Rightarrow 5 \div 4 - 2 + 7 \times 3$$

$$\Rightarrow 1.25 - 2 + 7 \times 3$$

$$\Rightarrow 1.25 - 2 + 21$$

$$\Rightarrow 20.25 \neq 14$$

**Fourth option:** + and  $\times$

$$5 - 4 \div 2 + 7 \times 3 = 14$$

$$\Rightarrow 5 - 4 \div 2 \times 7 + 3$$

$$\Rightarrow 5 - 2 \times 7 + 3$$

$$\Rightarrow 5 - 14 + 3$$

$$\Rightarrow -6 \neq 14$$

Here, only the second option satisfies the equation. Hence, the **second option** is correct.

**Q. 39** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$54 \text{ C } 34 \text{ A } 24 \text{ D } 8 \text{ B } 2 = ?$$

**Option 1:**

29

**Option 2:**

23

**Option 3:**

26

**Option 4:**

21

**Correct Answer:**

26

**Solution:**

**Given:**

A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$   
 $54 C 34 A 24 D 8 B 2 = ?$

After replacing the letters with the mathematical signs, we get –

$$= 54 - 34 + 24 \div 8 \times 2$$

$$= 54 - 34 + 3 \times 2$$

$$= 54 - 34 + 6$$

$$= 26$$

So, 26 is the answer to the given equation. Hence, the **third option** is correct.

**Q. 40** **Directions:** If M denotes  $-$ , N denotes  $\div$ , O denotes  $\times$ , and P denotes  $+$ , then what will come in place of (?) in the following equation?

$$162 N 6 M \sqrt[3]{729} O 4 P 126 = ?$$

**Option 1:**

117

**Option 2:**

125

**Option 3:**

121

**Option 4:**

112

**Correct Answer:**

117

**Solution:**

**Given:**

$$162 \text{ N } 6 \text{ M } \sqrt[3]{729} \text{ O } 4 \text{ P } 126 = ?$$

After replacing the letters with the mathematical signs, we get:

$$= 162 \div 6 - \sqrt[3]{729} \times 4 + 126$$

$$= 27 - \sqrt[3]{729} \times 4 + 126$$

$$= 27 - 9 \times 4 + 126$$

$$= 27 - 36 + 126$$

$$= 117$$

So, 117 is the answer to the given equation. Hence, the **first option** is correct.

- Q. 41** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $10\ B\ 19\ A\ 10\ D\ 10\ C\ 7 = ?$

**Option 1:**

184

**Option 2:**

165

**Option 3:**

180

**Option 4:**

140

**Correct Answer:**

184

**Solution:**

**Given:**

$$10\ B\ 19\ A\ 10\ D\ 10\ C\ 7 = ?$$

After replacing the letters with the mathematical signs, we get -

$$= 10 \times 19 + 10 \div 10 - 7$$

$$= 10 \times 19 + 1 - 7$$

$$= 190 + 1 - 7$$
$$= 184$$

So, 184 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 42** **Directions:** If P denotes  $\times$ , Q denotes  $\div$ , R denotes  $+$ , and S denotes  $-$ , then what will come in place of (?) in the following equation?

$$94 R 16 Q 2 P 7 S 64 R 13 P 2 = ?$$

**Option 1:**  
120

**Option 2:**  
118

**Option 3:**  
108

**Option 4:**  
112

**Correct Answer:**  
112

**Solution:**

**Given:**

$$94 R 16 Q 2 P 7 S 64 R 13 P 2 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 94 + 16 \div 2 \times 7 - 64 + 13 \times 2$$

$$= 94 + 8 \times 7 - 64 + 13 \times 2$$

$$= 94 + 56 - 64 + 26$$

$$= 112$$

So, 112 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 43**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$23 C 46 D 23 B 3 A 65 = ?$$

**Option 1:**

82

**Option 2:**

87

**Option 3:**

84

**Option 4:**

85

**Correct Answer:**

82

**Solution:**

**Given:**

$$23 \text{ C } 46 \text{ D } 23 \text{ B } 3 \text{ A } 65 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 23 - 46 \div 23 \times 3 + 65$$

$$= 23 - 2 \times 3 + 65$$

$$= 23 - 6 + 65$$

$$= 82$$

So, 82 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 44** **Directions:** If P denotes  $\times$ , Q denotes  $\div$ , R denotes  $+$ , and S denotes  $-$ , then what will come in place of (?) in the following equation?

$$\sqrt[4]{81} \text{ R } 6 \text{ P } 3 \text{ S } 26 \text{ R } 64 = ?$$

**Option 1:**

63

**Option 2:**

65

**Option 3:**

56

**Option 4:**

59

**Correct Answer:**

59

**Solution:**

**Given:**

$$\sqrt[4]{81} R 6 P 3 S 26 R 64 = ?$$

After replacing the letters with the mathematical signs, we get:

$$= \sqrt[4]{81} + 6 \times 3 - 26 + 64$$

$$= 3 + 6 \times 3 - 26 + 64$$

$$= 3 + 18 - 26 + 64$$

$$= 59$$

So, 59 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 45** **Directions:** If + means −, − means ×, × means ÷, and ÷ means +, what will be the value of the following expression?

$$64 \times 8 \div 24 - 5 + 3 = ?$$

**Option 1:**

7

**Option 2:**

125

**Option 3:**

64

**Option 4:**

157

**Correct Answer:**

125

**Solution:**

**Given:**

$$64 \times 8 \div 24 - 5 + 3 = ?$$

On interchanging the mathematical sign, we get –

$$= 64 \div 8 + 24 \times 5 - 3$$

$$= 8 + 24 \times 5 - 3$$

$$= 8 + 120 - 3$$
$$= 125$$

So, 125 is the required answer. Hence, the **second option** is correct.

**Q. 46** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $144 \text{ C } 8 \text{ B } 20 \text{ A } 81 \text{ D } 3 = ?$

**Option 1:**  
23

**Option 2:**  
11

**Option 3:**  
45

**Option 4:**  
21

**Correct Answer:**  
11

**Solution:**

**Given:**

$$144 \text{ C } 8 \text{ B } 20 \text{ A } 81 \text{ D } 3 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 144 - 8 \times 20 + 81 \div 3$$

$$= 144 - 8 \times 20 + 27$$

$$= 144 - 160 + 27$$

$$= 11$$

So, 11 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 47**     **Directions:** If – means +,  $\times$  means  $\div$ ,  $\div$  means –, and + means  $\times$ , what will come in place of the question mark (?)?

$$76 \times 4 + 13 \div 8 - 3 = ?$$

**Option 1:**

236

**Option 2:**

212

**Option 3:**

108

**Option 4:**

242

**Correct Answer:**

242

**Solution:**

**Given:**

$$76 \times 4 + 13 \div 8 - 3 = ?$$

On interchanging the mathematical sign, we get –

$$= 76 \div 4 \times 13 - 8 + 3$$

$$= 19 \times 13 - 8 + 3$$

$$= 247 - 8 + 3$$

$$= 242$$

So, 242 is the required answer. Hence, the **fourth option** is correct.

---

**Q. 48**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$35 \text{ A } 68 \text{ D } 34 \text{ C } 16 \text{ B } 1 = ?$$

**Option 1:**

21

**Option 2:**

41

**Option 3:**

31

**Option 4:**

51

**Correct Answer:**

21

**Solution:**

**Given:**

$$35 \text{ A } 68 \text{ D } 34 \text{ C } 16 \text{ B } 1 = ?$$

After replacing the letters with the mathematical signs, we get -

$$= 35 + 68 \div 34 - 16 \times 1$$

$$= 35 + 2 - 16 \times 1$$

$$= 35 + 2 - 16$$

$$= 21$$

So, 21 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 49** **Directions:** If I denotes  $\div$ , J denotes  $\times$ , K denotes  $-$ , and L denotes  $+$ , then what will come in place of (?) in the following equation?

$$17 \text{ J } 6 \text{ K } 21 \text{ L } 93 \text{ I } 3 \text{ L } 35 \text{ K } 12 = ?$$

**Option 1:**

135

**Option 2:**

130

**Option 3:**

140

**Option 4:**

128

**Correct Answer:**

135

**Solution:**

**Given:**

$$17J 6 K 21 L 93 I 3 L 35 K 12 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 17 \times 6 - 21 + 93 \div 3 + 35 - 12$$

$$= 17 \times 6 - 21 + 31 + 35 - 12$$

$$= 102 - 21 + 31 + 35 - 12$$

$$= 135$$

So, 135 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 50** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $200\ C\ 12\ B\ 15\ A\ 26\ D\ 13 = ?$

**Option 1:**

22

**Option 2:**

24

**Option 3:**

23

**Option 4:**

26

**Correct Answer:**

22

**Solution:**

**Given:**

$200\ C\ 12\ B\ 15\ A\ 26\ D\ 13 = ?$

After replacing the letters with the mathematical signs, we get -

$$200 - 12 \times 15 + 26 \div 13$$

$$= 200 - 12 \times 15 + 2$$

$$= 200 - 180 + 2$$

$$= 22$$

Hence, the **first option** is correct.

**Q. 51** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?

$$34 \text{ A } 15 \text{ B } 3 \text{ C } 11 \text{ B } 2 \text{ A } (51 \text{ D } 17) = ?$$

**Option 1:**

60

**Option 2:**

58

**Option 3:**

65

**Option 4:**

53

**Correct Answer:**

60

**Solution:**

**Given:**

$$34 \text{ A } 15 \text{ B } 3 \text{ C } 11 \text{ B } 2 \text{ A } (51 \text{ D } 17) = ?$$

After replacing the letters with the mathematical signs, we get -

$$\Rightarrow 34 + 15 \times 3 - 11 \times 2 + (51 \div 17)$$

$$\Rightarrow 34 + 15 \times 3 - 11 \times 2 + 3$$

$$\Rightarrow 34 + 45 - 22 + 3$$

$$= 60$$

Hence, the **first option** is correct.

---

**Q. 52**    **Directions:** If + means -, - means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means +, what will be the value of the following expression?

$$24 - 20 \times 12 + 18 \div 5$$

**Option 1:**

17

**Option 2:**

27

**Option 3:**

480

**Option 4:**

53

**Correct Answer:**

27

**Solution:**

**Given:**

+ means -, - means ×, × means ÷, and ÷ means +.

$$24 - 20 \times 12 + 18 \div 5$$

On interchanging the symbols in the above equation, we get -

$$= 24 \times 20 \div 12 - 18 + 5$$

$$= 40 - 18 + 5$$

$$= 45 - 18$$

$$= 27$$

So, 27 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 53**

**Directions:** If + means -, × means ÷, - means ×, and ÷ means +, what will come in place of the question mark (?)?

$$89 \times 36 - 9 + 2 \div 11 = ?$$

**Option 1:**

71

**Option 2:**

79

**Option 3:**

83

**Option 4:**

92

**Correct Answer:**

71

**Solution:**

**Given:**

$$89 \times 36 - 9 + 2 \div 11 = ?$$

On interchanging the mathematical signs, we get -

$$= 89 + 36 \div 9 - 2 \times 11$$

$$= 89 + 4 - 2 \times 11$$

$$= 89 + 4 - 22$$

$$= 93 - 22$$

$$= 71$$

Hence, the **first option** is correct.

**Q. 54** **Directions:** If P denotes  $\times$ , Q denotes  $\div$ , R denotes  $+$ , and S denotes  $-$ , then what will come in place of (?) in the following equation?

$$115 \text{ Q } 23 \text{ R } \sqrt[3]{64} \text{ S } 3 \text{ P } 9 \text{ R } 44 = ?$$

**Option 1:**

26

**Option 2:**

24

**Option 3:**

32

**Option 4:**

28

**Correct Answer:**

26

**Solution:**

**Given:**

$$115 \text{ Q } 23 \text{ R } \sqrt[3]{64} \text{ S } 3 \text{ P } 9 \text{ R } 44 = ?$$

After replacing the letters with the mathematical signs, we get -

$$= 115 \div 23 + \sqrt[3]{64} - 3 \times 9 + 44$$

$$= 5 + \sqrt[3]{64} - 3 \times 9 + 44$$

$$= 5 + 4 - 3 \times 9 + 44$$

$$= 5 + 4 - 27 + 44$$

$$= 26$$

So, 26 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 55** **Directions:** Which two signs should be interchanged to make the given equation correct?

$$12 + 156 \div 13 \times 6 - 100 = 50$$

**Option 1:**

$\div$  and  $\times$

**Option 2:**

$+$  and  $\times$

**Option 3:**

$-$  and  $\times$

**Option 4:**

$\div$  and  $-$

**Correct Answer:**

$+$  and  $\times$

**Solution:**

**Given:**

$$12 + 156 \div 13 \times 6 - 100 = 50$$

Let's check the options -

**First option:**  $\div$  and  $\times$

$$\Rightarrow 12 + 156 \times 13 \div 6 - 100 = 50$$

Solving the L.H.S. of the equation -

$$= 12 + 338 - 100$$

$$= 250 \neq 50$$

**Second option:** + and  $\times$

$$\Rightarrow 12 \times 156 \div 13 + 6 - 100 = 50$$

Solving the L.H.S. of the equation -

$$= 12 \times 12 + 6 - 100$$

$$= 144 + 6 - 100$$

$$= 50$$

**Third option:** - and  $\times$

$$\Rightarrow 12 + 156 \div 13 - 6 \times 100 = 50$$

Solving the L.H.S. of the equation -

$$= 12 + 12 - 6 \times 100$$

$$= 12 + 12 - 600$$

$$= -576 \neq 50$$

**Fourth option:**  $\div$  and -

$$\Rightarrow 12 + 156 - 13 \times 6 \div 100 = 50$$

Solving the L.H.S. of the equation -

$$= 12 + 156 - 13 \times 0.06$$

$$= 12 + 156 - 0.78$$

$$= 167.22 \neq 50$$

So, only the second option satisfies the given equation. Hence, the **second option** is correct.

**Q. 56** **Directions:** If  $-$  means  $+$ ,  $\times$  means  $\div$ ,  $\div$  means  $-$ , and  $+$  means  $\times$ , what will come in place of the question mark(?)?

$$32 + 36 \times 4 - 21 \div 56 = ?$$

**Option 1:**

283

**Option 2:**

253

**Option 3:**

276

**Option 4:**

323

**Correct Answer:**

253

**Solution:**

**Given:**

$$32 + 36 \times 4 - 21 \div 56 = ?$$

On interchanging the sign as per the instruction, we get -

$$= 32 \times 36 \div 4 + 21 - 56$$

$$= 32 \times 9 + 21 - 56$$

$$= 288 + 21 - 56$$
$$= 253$$

So, 253 is the required answer. Hence, the **second option** is correct.

**Q. 57** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?  
 $48 \text{ D } 12 \text{ A } (\sqrt{36} \text{ B } 3) \text{ C } 19 \text{ A } 24 = ?$

**Option 1:**

31

**Option 2:**

27

**Option 3:**

35

**Option 4:**

22

**Correct Answer:**

27

**Solution:**

**Given:**

$$48 \text{ D } 12 \text{ A } (\sqrt{36} \text{ B } 3) \text{ C } 19 \text{ A } 24 = ?$$

After replacing the letters with the mathematical signs, we get -

$$= 48 \div 12 + (\sqrt{36} \times 3) - 19 + 24$$

$$= 4 + (\sqrt{36} \times 3) - 19 + 24$$

$$= 4 + (6 \times 3) - 19 + 24$$

$$= 4 + 18 - 19 + 24$$

$$= 27$$

So, 27 is the answer to the given equation. Hence, the **second option** is correct.

- Q. 58**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $456 \text{ C } 236 \text{ D } 2 \text{ A } 14 \text{ B } 1 = ?$

**Option 1:**

352

**Option 2:**

234

**Option 3:**

353

**Option 4:**

453

**Correct Answer:**

352

**Solution:**

**Given:**

$$456 \text{ C } 236 \text{ D } 2 \text{ A } 14 \text{ B } 1 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 456 - 236 \div 2 + 14 \times 1$$

$$= 456 - 118 + 14 \times 1$$

$$= 456 - 118 + 14$$

$$= 352$$

So, 352 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 59** **Directions:** If M denotes –, N denotes  $\div$ , O denotes  $\times$ , and P denotes +, then what will come in place of (?) in the following equation?

$$185 \text{ N } 5 \text{ P } 62 \text{ M } 32 \text{ O } 4 \text{ P } 32 = ?$$

**Option 1:**

12

*Option 2:*

5

*Option 3:*

9

*Option 4:*

3

*Correct Answer:*

3

**Solution:**

**Given:**

$$185 \text{ N } 5 \text{ P } 62 \text{ M } 32 \text{ O } 4 \text{ P } 32 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 185 \div 5 + 62 - 32 \times 4 + 32$$

$$= 37 + 62 - 32 \times 4 + 32$$

$$= 37 + 62 - 128 + 32$$

$$= 3$$

So, 3 is the answer to the given equation. Hence, the **fourth option** is correct.

**Q. 60** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?  
(51 D 17) A (21 B 9) C 78 A (16 D 4) = ?

**Option 1:**

124

**Option 2:**

106

**Option 3:**

118

**Option 4:**

112

**Correct Answer:**

118

**Solution:**

**Given:**

$$(51 \text{ D } 17) \text{ A } (21 \text{ B } 9) \text{ C } 78 \text{ A } (16 \text{ D } 4) = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= (51 \div 17) + (21 \times 9) - 78 + (16 \div 4)$$

$$\begin{aligned} &= 3 + 189 - 78 + 4 \\ &= 196 - 78 \\ &= 118 \end{aligned}$$

Hence, the **third option** is correct.

**Q. 61** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
 $32 \text{ C } 16 \text{ D } 8 \text{ A } 4 \text{ B } 2 = ?$

**Option 1:**  
38

**Option 2:**  
89

**Option 3:**  
35

**Option 4:**  
98

**Correct Answer:**  
38

**Solution:**

**Given:**

$$32 C 16 D 8 A 4 B 2 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 32 - 16 \div 8 + 4 \times 2$$

$$= 32 - 2 + 4 \times 2$$

$$= 32 - 2 + 8$$

$$= 38$$

Hence, the **first option** is correct.

---

**Q. 62**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes –, and D denotes  $\div$ , then what will be the value of the following expression?

$$72 D 12 A 16 C 4 B 2 = ?$$

**Option 1:**

14

**Option 2:**

45

**Option 3:**

30

**Option 4:**

19

**Correct Answer:**

14

**Solution:**

**Given:**

$$72 \text{ D } 12 \text{ A } 16 \text{ C } 4 \text{ B } 2 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 72 \div 12 + 16 - 4 \times 2$$

$$= 6 + 16 - 4 \times 2$$

$$= 6 + 16 - 8$$

$$= 14$$

Hence, the **first option** is correct.

**Q. 63** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$45 \text{ A } 15 \text{ D } 15 \text{ C } 14 \text{ B } 2 = ?$$

**Option 1:**

18

*Option 2:*

12

*Option 3:*

14

*Option 4:*

15

*Correct Answer:*

18

**Solution:**

**Given:**

$$45 \text{ A } 15 \text{ D } 15 \text{ C } 14 \text{ B } 2 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 45 + 15 \div 15 - 14 \times 2$$

$$= 45 + 1 - 14 \times 2$$

$$= 45 + 1 - 28$$

$$= 18$$

Hence, the **first option** is correct.

**Q. 64** **Directions:** If  $\times$  means  $+$ ,  $+$  means  $-$ ,  $-$  means  $\div$ , and  $\div$  means  $\times$ , then what will come in place of the question mark?

$$13 \times 6 \div 18 + 98 - 7 = ?$$

**Option 1:**

107

**Option 2:**

95

**Option 3:**

102

**Option 4:**

88

**Correct Answer:**

107

**Solution:**

**Given:**

$$13 \times 6 \div 18 + 98 - 7 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 13 + 6 \times 18 - 98 \div 7$$

$$\begin{aligned} &= 13 + 6 \times 18 - 14 \\ &= 13 + 108 - 14 \\ &= 107 \end{aligned}$$

Hence, the **first option** is correct.

**Q. 65** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?  
67 C 45 A 12 D 6 B 2 = ?

**Option 1:**  
23

**Option 2:**  
22

**Option 3:**  
26

**Option 4:**  
24

**Correct Answer:**  
26

**Solution:**

**Given:**

$$67 C 45 A 12 D 6 B 2 = ?$$

On replacing the letters with the mathematical signs, the equation becomes –

$$= 67 - 45 + 12 \div 6 \times 2$$

$$= 67 - 45 + 2 \times 2$$

$$= 67 - 45 + 4$$

$$= 71 - 45$$

$$= 26$$

So, 26 is the required answer to the given equation. Hence, the **third option** is correct.

- Q. 66**     **Directions:** Select the correct combination of mathematical signs to sequentially replace the \* signs and to balance the given equation.  
 $(440 * 11) * 85 * 57 * (34 * 3)$

**Option 1:**

$$+, -, =, \div, +$$

**Option 2:**

$$\times, =, -, \div, +$$

**Option 3:**

$$+, \times, =, \div, +$$

**Option 4:**

$\div, -, =, -, \times$

**Correct Answer:**

$\div, -, =, -, \times$

**Solution:**

**Given:**

$$(440 * 11) * 85 * 57 * (34 * 3)$$

Let's check the given options -

**First option:**  $+, -, =, \div, +$

$$\Rightarrow (440 + 11) - 85 = 57 \div (34 + 3)$$

$$\text{L.H.S.} = 451 - 85 = 366$$

$$\text{R.H.S.} = 57 \div 37 = 1.54$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Second option:**  $\times, =, -, \div, +$

$$\Rightarrow (440 \times 11) = 85 - 57 \div (34 + 3)$$

$$\text{L.H.S.} = (440 \times 11) = 4840$$

$$\text{R.H.S.} = 85 - 57 \div 37 = 85 - 1.54 = 83.46$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Third option:**  $+, \times, =, \div, +$

$$\Rightarrow (440 + 11) \times 85 = 57 \div (34 + 3)$$

$$\text{L.H.S.} = 451 \times 85 = 38335$$

$$\text{R.H.S.} = 57 \div 37 = 1.54$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Fourth option:**  $\div, -, =, -, \times$

$$\Rightarrow (440 \div 11) - 85 = 57 - (34 \times 3)$$

$$\text{L.H.S.} = 40 - 85 = -45$$

$$\text{R.H.S.} = 57 - 102 = -45$$

$$\text{L.H.S.} = \text{R.H.S.}$$

So, only the fourth option satisfies the given equation. Hence, the **fourth option** is correct.

**Q. 67** **Directions:** If M denotes  $-$ , N denotes  $\div$ , O denotes  $\times$ , and P denotes  $+$ , then what will come in place of (?) in the following equation?

$$\sqrt{(169)} \text{ O } \sqrt{(25)} \text{ P } 48 \text{ N } 4 \text{ M } 21 \text{ P } 32 = ?$$

**Option 1:**

86

**Option 2:**

88

**Option 3:**

90

**Option 4:**

92

**Correct Answer:**

88

**Solution:**

**Given:**

$$\sqrt{(169)} \text{ O } \sqrt{(25)} \text{ P } 48 \text{ N } 4 \text{ M } 21 \text{ P } 32 = ?$$

On replacing the letters with the assigned mathematical signs, the equation becomes –

$$= \sqrt{(169)} \times \sqrt{(25)} + 48 \div 4 - 21 + 32$$

$$= 13 \times 5 + 12 - 21 + 32$$

$$= 65 + 12 - 21 + 32$$

$$= 109 - 21$$

$$= 88$$

So, 88 is the required answer to the given equation. Hence, the **second option** is correct.

- Q. 68**     **Directions:** If A denotes +, B denotes  $\times$ , C denotes –, and D denotes  $\div$ , then what will come in place of (?) in the following equation?  
 $16 \text{ D } 2 \text{ B } 9 \text{ C } 15 \text{ A } 32 = ?$

**Option 1:**

89

**Option 2:**

99

**Option 3:**

97

**Option 4:**

93

**Correct Answer:**

89

**Solution:**

**Given:**

$$16 \text{ D } 2 \text{ B } 9 \text{ C } 15 \text{ A } 32 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 16 \div 2 \times 9 - 15 + 32$$

$$= 8 \times 9 - 15 + 32$$

$$= 72 - 15 + 32$$

$$= 89$$

So, 89 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 69** **Directions:** Which two signs should be interchanged to make the given equation correct?

$$192 \times 16 + 9 - 8 \div 2 = 5$$

**Option 1:**

$\times$  and  $\div$

**Option 2:**

+ and -

**Option 3:**

× and -

**Option 4:**

+ and ÷

**Correct Answer:**

× and ÷

**Solution:**

**Given:**

$$192 \times 16 + 9 - 8 \div 2 = 5$$

Let's check the given options -

**First Option:** × and ÷

$$\Rightarrow 192 \div 16 + 9 - 8 \times 2 = 5$$

Solving the L.H.S. of the equation -

$$= 12 + 9 - 8 \times 2$$

$$= 12 + 9 - 16$$

$$= 5$$

**Second option:** + and -

$$\Rightarrow 192 \times 16 - 9 + 8 \div 2 = 5$$

Solving the L.H.S. of the equation -

$$= 192 \times 16 - 9 + 4$$

$$= 3072 - 9 + 4$$

$$= 3067 \neq 5$$

**Third option:** × and -

$$\Rightarrow 192 - 16 + 9 \times 8 \div 2 = 5$$

Solving the L.H.S. of the equation -

$$= 192 - 16 + 9 \times 4$$

$$= 192 - 16 + 36$$

$$= 212 \neq 5$$

**Fourth option:** + and  $\div$

$$\Rightarrow 192 \times 16 \div 9 - 8 + 2 = 5$$

Solving the L.H.S. of the equation -

$$= 192 \times 1.78 - 8 + 2$$

$$= 341.76 - 8 + 2$$

$$= 335.76 \neq 5$$

So, only the first option satisfies the given equation. Hence, the **first option** is correct.

**Q. 70** **Directions:** If + means  $-$ ,  $-$  means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means  $+$ , what will be the value of the following expression?

$$20 \div 2 + 4 - 8 \times 4 = ?$$

**Option 1:**

14

**Option 2:**

10

*Option 3:*

8

*Option 4:*

4

**Correct Answer:**

14

**Solution:**

**Given:**

$$20 \div 2 + 4 - 8 \times 4 = ?$$

On interchanging the mathematical signs, we get -

$$= 20 + 2 - 4 \times 8 \div 4$$

$$= 20 + 2 - 4 \times 2$$

$$= 20 + 2 - 8$$

$$= 14$$

So, 14 is the required answer. Hence, the **first option** is correct.

---

**Q. 71** **Directions:** If + means -, - means ×, × means ÷, and ÷ means +, what will be the value of the following expression?

$$65 \div 35 + 72 \times 8 - 5 = ?$$

**Option 1:**

195

**Option 2:**

45

**Option 3:**

455

**Option 4:**

55

**Correct Answer:**

55

**Solution:**

**Given:**

$$65 \div 35 + 72 \times 8 - 5 = ?$$

On interchanging the sign as per the instruction and solving the equation, we will get –

$$= 65 + 35 - 72 \div 8 \times 5$$

$$= 65 + 35 - 9 \times 5$$

$$= 65 + 35 - 45$$

$$= 55$$

So, 55 is the required answer. Hence, the **fourth option** is correct.

**Q. 72** **Directions:** If  $\div$  means  $-$ ,  $-$  means  $\times$ ,  $\times$  means  $+$ ,  $+$  means  $\div$ , what will come in place of the question mark (?)?

$$132 + 6 - 9 \times 13 \div 31 = ?$$

**Option 1:**

180

**Option 2:**

206

**Option 3:**

216

**Option 4:**

208

**Correct Answer:**

180

**Solution:**

**Given:**

$$132 + 6 - 9 \times 13 \div 31 = ?$$

On interchanging the mathematical signs, we get -

$$= 132 \div 6 \times 9 + 13 - 31$$

$$= 22 \times 9 + 13 - 31$$

$$\begin{aligned} &= 198 + 13 - 31 \\ &= 211 - 31 \\ &= 180 \end{aligned}$$

Hence, the **first option** is correct.

**Q. 73** **Directions:** If I denotes  $\div$ , J denotes  $\times$ , K denotes  $-$ , and L denotes  $+$ , then what will come in place of (?) in the following equation?

$$29 \text{ J } 7 \text{ K } 168 \text{ I } 4 \text{ L } 71 \text{ K } 39 \text{ L } 14 \text{ J } 2 = ?$$

**Option 1:**

221

**Option 2:**

228

**Option 3:**

216

**Option 4:**

235

**Correct Answer:**

221

**Solution:**

**Given:**

I denotes  $\div$ , J denotes  $\times$ , K denotes  $-$ , and L denotes  $+$   
 $29 J 7 K 168 I 4 L 71 K 39 L 14 J 2 = ?$

On replacing the letters with mathematical signs, we get  $-$

$$= 29 \times 7 - 168 \div 4 + 71 - 39 + 14 \times 2$$

$$= 29 \times 7 - 42 + 71 - 39 + 14 \times 2$$

$$= 203 - 42 + 71 - 39 + 28$$

$$= 221$$

Hence, the **first option** is correct.

**Q. 74** **Directions:** If A denotes  $+$ , B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?

$$124 D 4 C 86 D 2 A 61 A 17 B 3 = ?$$

**Option 1:**

100

**Option 2:**

98

**Option 3:**

92

**Option 4:**

110

**Correct Answer:**

100

**Solution:**

**Given:**

$$124 \text{ D } 4 \text{ C } 86 \text{ D } 2 \text{ A } 61 \text{ A } 17 \text{ B } 3 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 124 \div 4 - 86 \div 2 + 61 + 17 \times 3$$

$$= 31 - 43 + 61 + 17 \times 3$$

$$= 31 - 43 + 61 + 51$$

$$= 100$$

So, 100 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 75** **Directions:** If + means –, – means ×, × means ÷, and ÷ means +, what will be the value of the following expression?

$$2 \div 5 + 2 - 5 \times 5 = ?$$

**Option 1:**

5

*Option 2:*

10

*Option 3:*

8

*Option 4:*

6

*Correct Answer:*

5

**Solution:**

**Given:**

$$2 \div 5 + 2 - 5 \times 5 = ?$$

After interchanging the given mathematical signs, we get –

$$\Rightarrow 2 + 5 - 2 \times 5 \div 5$$

$$\Rightarrow 2 + 5 - 2 \times 1$$

$$\Rightarrow 2 + 5 - 2$$

$$\Rightarrow 5$$

So, 5 is the answer to the given equation. Hence, the **first option** is correct.

**Q. 76** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation?

$$94 \text{ A } 16 \text{ B } 3 \text{ C } 86 \text{ A } 14 \text{ D } 7 = ?$$

**Option 1:**

48

**Option 2:**

58

**Option 3:**

62

**Option 4:**

51

**Correct Answer:**

58

**Solution:**

**Given:**

$$94 \text{ A } 16 \text{ B } 3 \text{ C } 86 \text{ A } 14 \text{ D } 7 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 94 + 16 \times 3 - 86 + 14 \div 7$$

$$\begin{aligned}
 &= 94 + 16 \times 3 - 86 + 2 \\
 &= 94 + 48 - 86 + 2 \\
 &= 144 - 86 \\
 &= 58
 \end{aligned}$$

Hence, the **second option** is correct.

**Q. 77** **Directions:** Select the correct combination of mathematical signs to sequentially replace the \* signs and to balance the given equation.

$$(44 * 3) * 9 * 89 * (174 * 29) * 58$$

**Option 1:**

$$\div, -, =, -, \times, -$$

**Option 2:**

$$+, \div, +, =, -, \times$$

**Option 3:**

$$\times, +, =, +, \times, \div$$

**Option 4:**

$$\times, +, =, -, \div, +$$

**Correct Answer:**

$$\times, +, =, -, \div, +$$

**Solution:**

**Given:**

$$(44 * 3) * 9 * 89 * (174 * 29) * 58$$

Let's check the given options -

**First option:**  $\div, -, =, -, \times, -$

$$\Rightarrow (44 \div 3) - 9 = 89 - (174 \times 29) - 58$$

Solving the L.H.S. of the equation -

$$= 14.67 - 9 = 5.67$$

Solving the R.H.S. of the equation -

$$= 89 - 5046 - 58$$

$$= -5015$$

L.H.S.  $\neq$  R.H.S.

**Second option:**  $+, \div, +, =, -, \times$

$$\Rightarrow (44 + 3) \div 9 + 89 = (174 - 29) \times 58$$

Solving the L.H.S. of the equation -

$$= 47 \div 9 + 89$$

$$= 5.22 + 89$$

$$= 94.22$$

Solving the R.H.S. of the equation -

$$= 145 \times 58 = 8410$$

L.H.S.  $\neq$  R.H.S.

**Third option:**  $\times, +, =, +, \times, \div$

$$\Rightarrow (44 \times 3) + 9 = 89 + (174 \times 29) \div 58$$

Solving the L.H.S. of the equation -

$$= 132 + 9 = 141$$

Solving the R.H.S. of the equation -

$$= 89 + 5046 \div 58$$

$$= 89 + 87 = 176$$

L.H.S.  $\neq$  R.H.S.

**Fourth option:**  $\times, +, =, -, \div, +$

$$\Rightarrow (44 \times 3) + 9 = 89 - (174 \div 29) + 58$$

Solving the L.H.S. of the equation -

$$= 132 + 9 = 141$$

Solving the R.H.S. of the equation -

$$= 89 - 6 + 58 = 141$$

L.H.S. = R.H.S.

So, only the fourth option satisfies the given equation. Hence, the **fourth option** is correct.

- Q. 78**    **Directions:** If A denotes +, B denotes  $\times$ , C denotes -, and D denotes  $\div$ , then what will come in place of (?) in the following equation?  
 $22 \text{ B } 2 \text{ A } 81 \text{ D } 3 \text{ C } 16 = ?$

**Option 1:**

52

**Option 2:**

50

**Option 3:**

55

**Option 4:**

57

**Correct Answer:**

55

**Solution:**

**Given:**

$$22 \text{ B } 2 \text{ A } 81 \text{ D } 3 \text{ C } 16 = ?$$

On replacing the alphabet, with mathematical signs we get –

$$= 22 \times 2 + 81 \div 3 - 16$$

$$= 22 \times 2 + 27 - 16$$

$$= 44 + 27 - 16$$

$$= 71 - 16$$

$$= 55$$

Hence, the **third option** is correct.

**Q. 79**     **Directions:** If & means +, # means –, @ means ×, and % means ÷, then what will be the value of the following expression?

$$32 \text{ \& } 8 \text{ @ } 10 \text{ \# } 144 \text{ \% } 16 = ?$$

**Option 1:**

100

**Option 2:**

102

**Option 3:**

101

**Option 4:**

103

**Correct Answer:**

103

**Solution:**

**Given:**

$$32 \& 8 @ 10 \# 144 \% 16 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 32 + 8 \times 10 - 144 \div 16$$

$$= 32 + 8 \times 10 - 9$$

$$= 32 + 80 - 9$$

$$= 103$$

Hence, the **fourth option** is correct.

**Q. 80** **Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will be the value of the following expression?

$$2 \text{ B } 12 \text{ D } 4 \text{ A } 16 \text{ C } 7 = ?$$

**Option 1:**

15

**Option 2:**

12

**Option 3:**

13

**Option 4:**

14

**Correct Answer:**

15

**Solution:**

**Given:**

$$2 \times 12 \div 4 + 16 - 7 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 2 \times 12 \div 4 + 16 - 7$$

$$= 2 \times 3 + 16 - 7$$

$$= 6 + 16 - 7$$

$$= 15$$

Hence, the **first option** is correct.

**Q. 81** **Directions:** Which two signs should be interchanged to make the given equation correct?

$$551 \div 19 - 16 \times 12 + 121 = 100$$

**Option 1:**

- and  $\times$

**Option 2:**

+ and  $\times$

**Option 3:**

$\div$  and  $\times$

**Option 4:**

+ and -

**Correct Answer:**

+ and -

**Solution:**

**Given:**

$$551 \div 19 - 16 \times 12 + 121 = 100$$

Let's check the options -

**First option:** - and  $\times$

On interchanging the mathematical signs, we get -

$$= 551 \div 19 \times 16 - 12 + 121$$

$$= 29 \times 16 - 12 + 121$$

$$= 464 - 12 + 121$$

$$= 585 - 12$$

$$= 573 \neq 100$$

**Second option:** + and  $\times$

On interchanging the mathematical signs, we get –

$$= 551 \div 19 - 16 + 12 \times 121$$

$$= 29 - 16 + 12 \times 121$$

$$= 29 - 16 + 1452$$

$$= 1481 - 16$$

$$= 1465 \neq 100$$

**Third option:**  $\div$  and  $\times$

On interchanging the mathematical signs, we get –

$$= 551 \times 19 - 16 \div 12 + 121$$

$$= 551 \times 19 - 1.33 + 121$$

$$= 10469 - 1.33 + 121$$

$$= 10590 - 1.33$$

$$= 10588.67 \neq 100$$

**Fourth option:** + and –

On interchanging the mathematical signs, we get –

$$= 551 \div 19 + 16 \times 12 - 121$$

$$= 29 + 16 \times 12 - 121$$

$$= 29 + 192 - 121$$

$$= 221 - 121$$

$$= 100$$

Only the fourth option satisfies the given equation. Hence, the **fourth option** is correct.

**Q. 82** **Directions:** If  $\times$  means  $+$ ,  $+$  means  $-$ ,  $-$  means  $\div$ , and  $\div$  means  $\times$ , what will come in place of the question mark?  
 $15 \div 5 \times 36 - 6 + 14 = ?$

**Option 1:**

116

**Option 2:**

108

**Option 3:**

84

**Option 4:**

67

**Correct Answer:**

67

**Solution:**

**Given:**

$$15 \div 5 \times 36 - 6 + 14 = ?$$

On interchanging the signs given in the equation, the equation becomes –

$$= 15 \times 5 + 36 \div 6 - 14$$

$$\begin{aligned} &= 15 \times 5 + 6 - 14 \\ &= 75 + 6 - 14 \\ &= 67 \end{aligned}$$

Hence, the **fourth option** is correct.

**Q. 83** **Directions:** On interchanging the given two numbers, which of the following equations will be correct?

1 and 6

I.  $7 - 5 + 1 \times 3 \div 6 = 20$

II.  $1 \times 7 + 6 - 4 \div 2 = 40$

**Option 1:**

Only I

**Option 2:**

Neither I nor II

**Option 3:**

Both I and II

**Option 4:**

Only II

**Correct Answer:**

Only I

**Solution:**

**Given:**

I.  $7 - 5 + 1 \times 3 \div 6 = 20$

II.  $1 \times 7 + 6 - 4 \div 2 = 40$

I.  $7 - 5 + 1 \times 3 \div 6 = 20$

On interchanging the numbers in the first equation, we get –

$7 - 5 + 6 \times 3 \div 1 = 20$

On solving the L.H.S. of the equation –

$= 7 - 5 + 6 \times 3$

$= 7 - 5 + 18$

$= 20$

II.  $1 \times 7 + 6 - 4 \div 2 = 40$

On interchanging the numbers in the second equation, we get –

$6 \times 7 + 1 - 4 \div 2 = 40$

On solving the L.H.S. of the equation –

$= 6 \times 7 + 1 - 2$

$= 42 + 1 - 2$

$= 41 \neq 40$

So, only the first equation is correct. Hence, the **first option** is correct.

**Q. 84** **Directions:** By interchanging which two signs the equation will be correct?

$15 + 5 \div 2 - 9 \times 3 = 22$

**Option 1:**

+ and -

**Option 2:**

× and ÷

**Option 3:**

× and -

**Option 4:**

÷ and +

**Correct Answer:**

× and ÷

**Solution:**

**Given:**

$$15 + 5 \div 2 - 9 \times 3 = 22$$

Let's check the options -

**First option:** + and -

On interchanging the mathematical signs, we get -

$$= 15 - 5 \div 2 + 9 \times 3$$

$$= 15 - 2.5 + 9 \times 3$$

$$= 15 - 2.5 + 27$$

$$= 39.5 \neq 22$$

**Second option:** × and ÷

On interchanging the mathematical signs, we get -

$$= 15 + 5 \times 2 - 9 \div 3$$

$$= 15 + 5 \times 2 - 3$$

$$= 15 + 10 - 3$$

$$= 22$$

**Third option:**  $\times$  and  $-$

On interchanging the mathematical signs, we get  $-$

$$= 15 + 5 \div 2 \times 9 - 3$$

$$= 15 + 2.5 \times 9 - 3$$

$$= 15 + 22.5 - 3$$

$$= 34.5 \neq 22$$

**Fourth option:**  $\div$  and  $+$

On interchanging the mathematical signs, we get  $-$

$$= 15 \div 5 + 2 - 9 \times 3$$

$$= 3 + 2 - 9 \times 3$$

$$= 3 + 2 - 27$$

$$= -22 \neq 22$$

Here, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct.

**Q. 85** **Directions:** Which two numbers should be interchanged to make the given equation correct?

$$13 + 4 \div 16 \times 5 - 22 = 11$$

**Option 1:**

13 and 22

**Option 2:**

16 and 22

**Option 3:**

13 and 16

**Option 4:**

4 and 16

**Correct Answer:**

4 and 16

**Solution:**

**Given:**

$$13 + 4 \div 16 \times 5 - 22 = 11$$

Let's check the options –

**First option:** 13 and 22

On interchanging the numbers, we get –

$$= 22 + 4 \div 16 \times 5 - 13$$

$$= 22 + 1.25 - 13$$

$$= 10.25 \neq 11$$

**Second option:** 16 and 22

On interchanging the numbers, we get –

$$= 13 + 4 \div 22 \times 5 - 16$$

$$= 13 + 0.91 - 16$$

$$= -2.09 \neq 11$$

**Third option:** 13 and 16

On interchanging the numbers, we get –

$$= 16 + 4 \div 13 \times 5 - 22$$

$$= 16 + 1.54 - 22$$

$$= -4.46 \neq 11$$

**Fourth option:** 4 and 16

On interchanging the numbers, we get –

$$= 13 + 16 \div 4 \times 5 - 22$$

$$= 13 + 20 - 22$$

$$= 11$$

Here, only the fourth option satisfies the R.H.S. of the given equation. Hence, the **fourth option** is correct.

- Q. 86**     **Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?  
 $14 \text{ C } (18 \text{ D } 3) \text{ A } 5 = ?$

**Option 1:**

31

**Option 2:**

13

**Option 3:**

20

**Option 4:**

17

**Correct Answer:**

13

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$14 \text{ C } (18 \text{ D } 3) \text{ A } 5 = ?$$

On replacing the alphabet, with mathematical signs we get –

$$= 14 - (18 \div 3) + 5$$

$$= 14 - 6 + 5$$

$$= 19 - 6$$

$$= 13$$

So, 13 is the answer to the given equation. Hence, the **second option** is correct.

**Q. 87**

**Directions:** After interchanging the given two numbers, what will be the value of the given equation?

6 and 2

$$9 \div 2 \times 6 + 5 - 1 = ?$$

**Option 1:**

13

**Option 2:**

7

**Option 3:**

5

**Option 4:**

9

**Correct Answer:**

7

**Solution:**

**Given:**

$$9 \div 2 \times 6 + 5 - 1 = ?$$

On interchanging the numbers, the equation becomes –

$$= 9 \div 6 \times 2 + 5 - 1$$

$$= 3 + 5 - 1$$

$$= 8 - 1$$

$$= 7$$

So, 7 is the required answer to the given equation. Hence, the **second option** is correct.

**Q. 88** **Directions:** By interchanging the given two numbers (not digits) which of the following equations will not be correct?  
5 and 6

**Option 1:**

$$6 \times 8 - 5 \times 4 = 16$$

**Option 2:**

$$5 \times 2 - 4 + 6 = 13$$

**Option 3:**

$$5 - 3 \times 6 + 4 = -3$$

**Option 4:**

$$6 - 5 + 2 = 1$$

**Correct Answer:**

$$5 - 3 \times 6 + 4 = -3$$

**Solution:**

**Given:**

5 and 6

Let's check the options -

**First option:**  $6 \times 8 - 5 \times 4 = 16$

On interchanging the numbers, we get -

$$= 5 \times 8 - 6 \times 4$$

$$= 40 - 24$$

$$= 16$$

**Second option:**  $5 \times 2 - 4 + 6 = 13$

On interchanging the numbers, we get -

$$= 6 \times 2 - 4 + 5$$

$$= 12 - 4 + 5$$

$$= 13$$

**Third option:**  $5 - 3 \times 6 + 4 = -3$

On interchanging the numbers, we get -

$$= 6 - 3 \times 5 + 4$$

$$= 6 - 15 + 4$$

$$= -5 \neq -3$$

**Fourth option:**  $6 - 5 + 2 = 1$

On interchanging the numbers, we get -

$$= 5 - 6 + 2$$

$$= 1$$

Hence, the **third option** is correct.

**Q. 89** **Directions:** Which two signs should be interchanged to make the given equation correct?

$$63 = 56 + 88 \div 11 - 15$$

**Option 1:**

- and =

**Option 2:**

+ and  $\div$

**Option 3:**

$\div$  and -

**Option 4:**

+ and =

**Correct Answer:**

- and =

**Solution:**

**Given:**

$$63 = 56 + 88 \div 11 - 15$$

Let's check the options -

**First option:** - and =

On interchanging the mathematical signs, we get -

$$\Rightarrow 63 - 56 + 88 \div 11 = 15$$

$$\text{L.H.S.} = 63 - 56 + 88 \div 11 = 63 - 56 + 8 = 15$$

$$\text{L.H.S.} = \text{R.H.S.}$$

**Second option:** + and  $\div$

On interchanging the mathematical signs, we get -

$$\Rightarrow 63 = 56 \div 88 + 11 - 15$$

$$\text{L.H.S.} = 63$$

$$\text{R.H.S.} = 56 \div 88 + 11 - 15 = 0.64 + 11 - 15$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Third option:**  $\div$  and -

On interchanging the mathematical signs, we get -

$$\Rightarrow 63 = 56 + 88 - 11 \div 15$$

$$\text{L.H.S.} = 63$$

$$\text{R.H.S.} = 56 + 88 - 11 \div 15$$

$$= 56 + 88 - 0.73$$

$$= 144 - 0.73$$

$$= 143.267$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Fourth option:** + and =

On interchanging the mathematical signs, we get -

$$\text{L.H.S.} = 63 + 56 = 119$$

$$\text{R.H.S.} = 88 \div 11 - 15 = 8 - 15 = -7$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

Hence, the **first option** is correct.

**Q. 90** **Directions:** After interchanging the given two signs, what will be the value of the given equation?

× and +

$$24 \times 8 + 6 \div 3 - 18 = ?$$

**Option 1:**

24

**Option 2:**

23

**Option 3:**

22

**Option 4:**

20

**Correct Answer:**

22

**Solution:**

**Given:**

× and +

$$24 \times 8 + 6 \div 3 - 18$$

After interchanging the mathematical signs, the equation becomes –

$$= 24 + 8 \times 6 \div 3 - 18$$

$$= 24 + 16 - 18$$

$$= 40 - 18$$

$$= 22$$

So, 22 is the required answer. Hence, the **third option** is correct.

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**Q. 91** **Directions:** After interchanging which two numbers, the value of the given equation will be 5.

$$7 - 3 \div 9 \times 2 + 4$$

**Option 1:**

2 and 9

**Option 2:**

7 and 4

**Option 3:**

3 and 9

**Option 4:**

4 and 2

**Correct Answer:**

3 and 9

**Solution:**

**Given:**

$$7 - 3 \div 9 \times 2 + 4$$

Interchange the numbers according to the options.

Let's check the options –

**First option:** 2 and 9

$$= 7 - 3 \div 2 \times 9 + 4$$

$$= 7 - 1.5 \times 9 + 4$$

$$= -2.5 \neq 5$$

**Second option:** 7 and 4

$$= 4 - 3 \div 9 \times 2 + 7$$

$$= 4 - 0.666 + 7$$

$$= 10.334 \neq 5$$

**Third Option:** 3 and 9

$$= 7 - 9 \div 3 \times 2 + 4$$

$$= 7 - 6 + 4$$

$$= 5$$

**Fourth Option:** 4 and 2

$$= 7 - 3 \div 9 \times 4 + 2$$

$$= 7 - 1.333 + 2$$

$$= 7.667 \neq 5$$

So, only the third option satisfies the equation. Hence, the **third option** is correct.

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**Q. 92**    **Directions:** Which two numbers should be interchanged, to make the given equation correct?  
 $120 \div 12 \times 6 + 24 - 15 = 27$

**Option 1:**

12 and 6

**Option 2:**

12 and 15

**Option 3:**

12 and 24

**Option 4:**

6 and 24

**Correct Answer:**

12 and 24

**Solution:**

**Given:**

$$120 \div 12 \times 6 + 24 - 15 = 27$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 12 and 6

$$120 \div 12 \times 6 + 24 - 15 = 27$$

$$= 120 \div 6 \times 12 + 24 - 15$$

$$= 240 + 9$$

$$= 249 \neq 27$$

**Second option:** 12 and 15

$$120 \div 12 \times 6 + 24 - 15 = 27$$

$$= 120 \div 15 \times 6 + 24 - 12$$

$$= 48 + 12$$

$$= 60 \neq 27$$

**Third option:** 12 and 24

$$120 \div 12 \times 6 + 24 - 15 = 27$$

$$= 120 \div 24 \times 6 + 12 - 15$$

$$= 30 - 3$$

$$= 27$$

**Fourth option:** 6 and 24

$$120 \div 12 \times 6 + 24 - 15 = 27$$

$$\begin{aligned} &= 120 \div 12 \times 24 + 6 - 15 \\ &= 240 - 9 \\ &= 231 \neq 27 \end{aligned}$$

Here, only the third option satisfies the R.H.S. of the given equation. Hence, the **third option** is correct.

**Q. 93** **Directions:** Which two signs should be interchanged to make the given equation correct?

$$2 - 8 \div 4 = 6 \times 3 + 18$$

**Option 1:**

× and –

**Option 2:**

= and +

**Option 3:**

× and +

**Option 4:**

+ and –

**Correct Answer:**

= and +

**Solution:**

**Given:**

$$2 - 8 \div 4 = 6 \times 3 + 18$$

Replace the given symbols according to the options one by one with the original symbols in the given equation.

**First option:**  $\times$  and  $-$

$$\Rightarrow 2 \times 8 \div 4 = 6 - 3 + 18$$

$$\Rightarrow 2 \times 2 = 3 + 18$$

$$\Rightarrow 4 \neq 21$$

**Second option:**  $=$  and  $+$

$$\Rightarrow 2 - 8 \div 4 + 6 \times 3 = 18$$

$$\Rightarrow 2 - 2 + 18 = 18$$

$$\Rightarrow 18 = 18$$

**Third option:**  $\times$  and  $+$

$$\Rightarrow 2 - 8 \div 4 = 6 + 3 \times 18$$

$$\Rightarrow 2 - 2 = 60$$

$$\Rightarrow 0 \neq 60$$

**Fourth option:**  $+$  and  $-$

$$\Rightarrow 2 + 8 \div 4 = 6 \times 3 - 18$$

$$\Rightarrow 2 + 2 = 0$$

$$\Rightarrow 4 \neq 0$$

So, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct

**Q. 94**

**Directions:** Which two numbers should be interchanged, to make the given equation correct?

$$96 \div 6 - 16 + 12 \times 8 = 40$$

**Option 1:**

6 and 16

**Option 2:**

96 and 16

**Option 3:**

6 and 8

**Option 4:**

6 and 12

**Correct Answer:**

6 and 12

**Solution:**

**Given:**

$$96 \div 6 - 16 + 12 \times 8 = 40$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 6 and 16

$$96 \div 6 - 16 + 12 \times 8 = 40$$

$$\Rightarrow 96 \div 16 - 6 + 12 \times 8 = 40$$

$$\Rightarrow 6 - 6 + 12 \times 8$$

$$\Rightarrow 96$$

$$\Rightarrow 96 \neq 40$$

**Second option:** 96 and 16

$$96 \div 6 - 16 + 12 \times 8 = 40$$

$$\Rightarrow 16 \div 6 - 96 + 12 \times 8 = 40$$

$$\Rightarrow 2.66 - 96 + 12 \times 8$$

$$\Rightarrow 2.66 - 96 + 96$$

$$\Rightarrow 2.66 \neq 40$$

**Third option:** 6 and 8

$$96 \div 6 - 16 + 12 \times 8 = 40$$

$$\Rightarrow 96 \div 8 - 16 + 12 \times 6 = 40$$

$$\Rightarrow 12 - 16 + 12 \times 6$$

$$\Rightarrow 12 - 16 + 72 = 68$$

$$\Rightarrow 68 \neq 40$$

**Fourth option:** 6 and 12

$$96 \div 6 - 16 + 12 \times 8 = 40$$

$$\Rightarrow 96 \div 12 - 16 + 6 \times 8 = 40$$

$$\Rightarrow 8 - 16 + 6 \times 8$$

$$\Rightarrow 8 - 16 + 48 = 40$$

$$\Rightarrow 40 = 40$$

So, the fourth option satisfies the equation. Hence, the **fourth option** is correct.

**Q. 95** **Directions:** After interchanging which two signs, the value of the given equation will be 1.

$$12 \times 6 - 28 + 3 \div 9$$

**Option 1:**

× and +

**Option 2:**

+ and -

**Option 3:**

÷ and ×

**Option 4:**

× and -

**Correct Answer:**

÷ and ×

**Solution:**

**Given:**

$$12 \times 6 - 28 + 3 \div 9$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

Let's check the given options -

**First Option:** × and +

$$\begin{aligned} &12 \times 6 - 28 + 3 \div 9 \\ &= 12 + 6 - 28 \times 3 \div 9 \\ &= 12 + 6 - 28 \times 0.33 \\ &= 12 + 6 - 9.34 \\ &= 8.66 \neq 1 \end{aligned}$$

**Second option:** + and -

$$\begin{aligned} &12 \times 6 - 28 + 3 \div 9 \\ &= 12 \times 6 + 28 - 3 \div 9 \\ &= 12 \times 6 + 28 - 0.33 \\ &= 72 + 28 - 0.33 \end{aligned}$$

$$= 99.67 \neq 1$$

**Third option:**  $\div$  and  $\times$

$$12 \times 6 - 28 + 3 \div 9$$

$$= 12 \div 6 - 28 + 3 \times 9$$

$$= 2 - 28 + 3 \times 9$$

$$= 2 - 28 + 27$$

$$= 1$$

**Fourth option:**  $\times$  and  $-$

$$12 \times 6 - 28 + 3 \div 9$$

$$= 12 - 6 \times 28 + 3 \div 9$$

$$= 12 - 6 \times 28 + 0.33$$

$$= 12 - 168 + 0.33$$

$$= -155.67 \neq 1$$

So, only the third option satisfies the given equation. Hence, the **third option** is correct.

**Q. 96**     **Directions:** Which two signs should be interchanged, to make the given equation correct?

$$8 + 9 \div 5 \times 4 - 2 = 7$$

**Option 1:**

= and +

**Option 2:**

- and =

**Option 3:**

÷ and -

**Option 4:**

+ and -

**Correct Answer:**

÷ and -

**Solution:**

**Given:**

$$8 + 9 \div 5 \times 4 - 2 = 7$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

Let's check the given options -

**First Option:** = and +

$$8 + 9 \div 5 \times 4 - 2 = 7$$

$$\Rightarrow 8 = 9 \div 5 \times 4 - 2 + 7$$

Solving the R.H.S. of the equation -

$$= 1.8 \times 4 - 2 + 7$$

$$= 7.2 - 2 + 7$$

$$= 12.2 \neq 8$$

**Second option:** - and =

$$8 + 9 \div 5 \times 4 - 2 = 7$$

$$\Rightarrow 8 + 9 \div 5 \times 4 = 2 - 7$$

Solving the L.H.S. of the equation -

$$= 8 + 1.8 \times 4$$

$$= 8 + 7.2$$

$$= 15.2$$

Solving the R.H.S. of the equation –

$$= 2 - 7$$

$$= -5$$

L.H.S  $\neq$  R.H.S

**Third option:**  $\div$  and  $-$

$$8 + 9 \div 5 \times 4 - 2 = 7$$

$$\Rightarrow 8 + 9 - 5 \times 4 \div 2 = 7$$

Solving the L.H.S. of the equation –

$$= 8 + 9 - 5 \times 2$$

$$= 8 + 9 - 10$$

$$= 7$$

**Fourth option:**  $+$  and  $-$

$$8 + 9 \div 5 \times 4 - 2 = 7$$

$$\Rightarrow 8 - 9 \div 5 \times 4 + 2 = 7$$

Solving the L.H.S. of the equation –

$$= 8 - 1.8 \times 4 + 2$$

$$= 8 - 7.2 + 2$$

$$= 2.8 \neq 7$$

So, only the third option satisfies the given equation. Hence, the **third option** is correct.

**Q. 97** **Directions:** Which two numbers should be interchanged, to make the given equation correct?

$$4 \times 8 - 12 + 5 = 16$$

**Option 1:**

4 and 5

**Option 2:**

8 and 5

**Option 3:**

16 and 8

**Option 4:**

12 and 16

**Correct Answer:**

8 and 5

**Solution:**

**Given:**

$$4 \times 8 - 12 + 5 = 16$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 4 and 5

$$\begin{aligned}4 \times 8 - 12 + 5 &= 16 \\= 5 \times 8 - 12 + 4 &= 16 \\= 40 - 12 + 4 \\= 32 &\neq 16\end{aligned}$$

**Second option:** 8 and 5

$$\begin{aligned}4 \times 8 - 12 + 5 &= 16 \\= 4 \times 5 - 12 + 8 &= 16\end{aligned}$$

$$= 20 - 12 + 8$$

$$= 16$$

**Third option:** 16 and 8

$$4 \times 8 - 12 + 5 = 16$$

$$= 4 \times 16 - 12 + 5 = 8$$

$$= 64 - 12 + 5$$

$$= 57 \neq 8$$

**Fourth option:** 12 and 16

$$4 \times 8 - 12 + 5 = 16$$

$$= 4 \times 8 - 16 + 5 = 12$$

$$= 32 - 16 + 5$$

$$= 21 \neq 12$$

So, only the second option satisfies the condition. Hence, the **second option** is correct.

**Q. 98** **Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$6 \text{ A } (9 \text{ D } 3) \text{ C } 4 = ?$$

**Option 1:**

8

**Option 2:**

5

*Option 3:*

12

*Option 4:*

7

*Correct Answer:*

5

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

6 A (9 D 3) C 4 = ?

After replacing the letters with symbols, the equation will be as follows –

$$= 6 + (9 \div 3) - 4$$

$$= 6 + 3 - 4$$

$$= 5$$

So, 5 is the required answer to the equation. Hence, the **second option** is correct.

**Q. 99** **Directions:** By Interchanging the given two numbers which of the following equations will be correct?

7 and 8

I.  $5 \times 7 + 6 \div 2 - 8 = 36$

II.  $8 + 3 \times 7 - 5 \div 1 = 26$

**Option 1:**

Neither I nor II

**Option 2:**

Only II

**Option 3:**

Both I and II

**Option 4:**

Only I

**Correct Answer:**

Both I and II

**Solution:**

**Given:**

I.  $5 \times 7 + 6 \div 2 - 8 = 36$

II.  $8 + 3 \times 7 - 5 \div 1 = 26$

After interchanging numbers 7 and 8, the equations are as follows –

$$\text{I. } 5 \times 7 + 6 \div 2 - 8 = 36$$

After interchanging,  $5 \times 8 + 6 \div 2 - 7 = 36$

$$\Rightarrow 5 \times 8 + 3 - 7 = 36$$

$$\Rightarrow 40 + 3 - 7 = 36$$

$$\Rightarrow 36 = 36$$

$$\text{II. } 8 + 3 \times 7 - 5 \div 1 = 26$$

After interchanging,  $7 + 3 \times 8 - 5 \div 1 = 26$

$$\Rightarrow 7 + 3 \times 8 - 5 = 26$$

$$\Rightarrow 7 + 24 - 5 = 26$$

$$\Rightarrow 26 = 26$$

So, both I and II satisfy the given equation. Hence, the **third option** is correct.

**Q.**  
**100**

**Directions:** Which two numbers should be interchanged, to make the given equation correct?

$$7 \times 3 - 98 \div 14 + 5 = 31$$

**Option 1:**

5 and 3

**Option 2:**

7 and 98

**Option 3:**

31 and 7

**Option 4:**

3 and 14

**Correct Answer:**

5 and 3

**Solution:**

**Given:**

$$7 \times 3 - 98 \div 14 + 5 = 31$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 5 and 3

$$7 \times 3 - 98 \div 14 + 5 = 31$$

$$\Rightarrow 7 \times 5 - 98 \div 14 + 3 = 31$$

$$\Rightarrow 7 \times 5 - 7 + 3 = 31$$

$$\Rightarrow 35 - 7 + 3 = 31$$

$$\Rightarrow 31 = 31$$

**Second option:** 7 and 98

$$7 \times 3 - 98 \div 14 + 5 = 31$$

$$\Rightarrow 98 \times 3 - 7 \div 14 + 5 = 31$$

$$\Rightarrow 294 - 0.5 + 5 = 31$$

$$\Rightarrow 298.5 \neq 31$$

**Third option:** 31 and 7

$$7 \times 3 - 98 \div 14 + 5 = 31$$

$$\Rightarrow 31 \times 3 - 98 \div 14 + 5 = 7$$

$$\Rightarrow 31 \times 3 - 7 + 5 = 7$$

$$\Rightarrow 91 \neq 7$$

**Fourth option:** 3 and 14

$$7 \times 3 - 98 \div 14 + 5 = 31$$

$$\Rightarrow 7 \times 14 - 98 \div 3 + 5 = 31$$

$$\Rightarrow 98 - 32.6 + 5 = 31$$

$$\Rightarrow 70.4 \neq 31$$

So, only the first option satisfies the given equation. Hence, the **first option** is correct.

**Q.  
101**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$12 + 4 \div 2 - 6 = 16$$

**Option 1:**

- and =

**Option 2:**

+ and -

**Option 3:**

÷ and =

**Option 4:**

÷ and +

**Correct Answer:**

+ and -

**Solution:****Given:**

$$12 + 4 \div 2 - 6 = 16$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

Let's check each option –

**First option:** – and =

$$12 + 4 \div 2 = 6 - 16$$

$$12 + 2 = -10$$

$$14 \neq -10$$

**Second option:** + and –

$$12 - 4 \div 2 + 6 = 16$$

$$12 - 2 + 6 = 16$$

$$16 = 16 \text{ (L.H.S. = R.H.S.)}$$

**Third option:**  $\div$  and =

$$12 + 4 = 2 - 6 \div 16$$

$$16 = 2 - 0.375$$

$$16 \neq 1.625$$

**Fourth option:**  $\div$  and +

$$12 \div 4 + 2 - 6 = 16$$

$$3 + 2 - 6 = 16$$

$$-1 \neq 16$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.

**Q.  
102**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$7 \text{ A } 5 \text{ C } (6 \text{ D } 3) = ?$$

**Option 1:**

32

**Option 2:**

16

**Option 3:**

10

**Option 4:**

19

**Correct Answer:**

10

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$7 \text{ A } 5 \text{ C } (6 \text{ D } 3) = ?$$

After replacing the letters with symbols, the equation will be as follows –

$$= 7 + 5 - (6 \div 3)$$

$$= 7 + 5 - 2$$

$$= 10$$

So, the required answer after solving the equation is 10. Hence, the **third option** is correct.

**Q.  
103**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$10 \text{ B } 2 \text{ C } (15 \text{ D } 5) = ?$$

**Option 1:**

19

**Option 2:**

15

**Option 3:**

21

**Option 4:**

17

**Correct Answer:**

17

**Solution:**

**Given:**

If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$10 \text{ B } 2 \text{ C } (15 \text{ D } 5) = ?$$

After replacing the letters with symbols, the equation will be as follows –

$$= 10 \times 2 - (15 \div 5)$$

$$= 10 \times 2 - 3$$

$$= 20 - 3$$

$$= 17$$

So, after solving the equation the required answer is 17. Hence the **fourth option** is correct.

**Q.  
104**

**Directions:** Which of the mathematical signs should be interchanged in the below equation, to make it mathematically correct?

$$10 + 54 \div 9 - 4 \times 60 = 116$$

**Option 1:**

– and ×

**Option 2:**

÷ and ×

**Option 3:**

+ and ×

**Option 4:**

+ and -

**Correct Answer:**

+ and ×

**Solution:**

**Given:**

$$10 + 54 \div 9 - 4 \times 60 = 116$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** - and ×

$$10 + 54 \div 9 - 4 \times 60 = 116$$

$$\Rightarrow 10 + 54 \div 9 \times 4 - 60$$

$$\Rightarrow 10 + 6 \times 4 - 60$$

$$\Rightarrow -26 \neq 116$$

**Second option:** ÷ and ×

$$10 + 54 \div 9 - 4 \times 60 = 116$$

$$\Rightarrow 10 + 54 \times 9 - 4 \div 60$$

$$\Rightarrow 10 + 54 \times 9 - 0.06$$

$$\Rightarrow 10 + 486 - 0.06$$

$$\Rightarrow 495.94 \neq 116$$

**Third option:** + and ×

$$10 + 54 \div 9 - 4 \times 60 = 116$$

$$\Rightarrow 10 \times 54 \div 9 - 4 + 60$$

$$\Rightarrow 10 \times 6 - 4 + 60$$

$$\Rightarrow 116 = 116$$

**Fourth option:** + and -

$$10 + 54 \div 9 - 4 \times 60 = 116$$

$$\Rightarrow 10 - 54 \div 9 + 4 \times 60$$

$$\Rightarrow 10 - 6 + 240$$

$$\Rightarrow 244 \neq 116$$

Here, only the third option satisfies the R.H.S. of the given equation. Hence, the **third option** is correct.

**Q.  
105**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$4 \text{ B } 12 \text{ A } 18 \text{ C } (72 \text{ D } 6) = ?$$

**Option 1:**

60

**Option 2:**

54

**Option 3:**

48

**Option 4:**

63

**Correct Answer:**

54

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division

$$4 B 12 A 18 C (72 D 6) = ?$$

After replacing the letters with symbols, the equation will be as follows -

$$= 4 \times 12 + 18 - (72 \div 6)$$

$$= 4 \times 12 + 18 - 12$$

$$= 48 + 18 - 12$$

$$= 54$$

So, the required answer after solving the equation is 54. Hence, the **second option** is correct.

**Q.  
106**

**Directions:** The prices of five cars B, M, J, N, and U are compared. The price of J is less than U, M, and N. The Price of B is the lowest. No two cars have the same price. The price of U is less than M. The Price of neither U nor M is the highest. How many cars have a price less than U?

**Option 1:**

1

**Option 2:**

3

**Option 3:**

2

**Option 4:**

0

**Correct Answer:**

2

**Solution:**

**Given:**

(I) The price of J is less than U, M, and N.

$M, N, U > J$

(II) The Price of B is the lowest. No two cars have the same price. The price of U is less than M.

$N, M > U > J > B$

(II) The Price of neither U nor M is the highest.

$N > M > U > J > B$

So, the price of two cars is less than the price of U. Hence, the **third option** is correct.

**Q.  
107**

**Directions:** After interchanging which two numbers, the value of the given equation will be 20.

$$8 \times 2 + 6 \div 3 - 7$$

**Option 1:**

6 and 7

**Option 2:**

8 and 7

**Option 3:**

2 and 6

**Option 4:**

2 and 3

**Correct Answer:**

2 and 3

**Solution:**

**Given:**

$$8 \times 2 + 6 \div 3 - 7$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 6 and 7

$$8 \times 2 + 6 \div 3 - 7$$

$$= 8 \times 2 + 7 \div 3 - 6$$

$$= 16 + 2.33 - 6$$

$$= 12.33 \neq 20$$

**Second option:** 8 and 7

$$8 \times 2 + 6 \div 3 - 7$$

$$= 7 \times 2 + 6 \div 3 - 8$$

$$= 7 \times 2 + 2 - 8$$

$$= 8 \neq 20$$

**Third option:** 2 and 6

$$8 \times 2 + 6 \div 3 - 7$$

$$= 8 \times 6 + 2 \div 3 - 7$$

$$= 8 \times 6 + 0.66 - 7$$

$$= 41.66 \neq 20$$

**Fourth option:** 2 and 3

$$8 \times 2 + 6 \div 3 - 7$$

$$= 8 \times 3 + 6 \div 2 - 7$$

$$= 8 \times 3 + 3 - 7$$

$$= 20$$

So, the fourth option satisfies the equation. Hence, the **fourth option** is correct.

**Q.  
108**

**Directions:** By interchanging the given two signs which of the following equations will be not correct?

+ and -

I.  $4 \times 6 + 7 - 3 \div 1 = 21$

II.  $6 \times 9 + 7 - 8 \div 2 = 51$

**Option 1:**

Only I

**Option 2:**

Both I and II

**Option 3:**

Neither I nor II

**Option 4:**

Only II

**Correct Answer:**

Only I

**Solution:**

**Given:**

I.  $4 \times 6 + 7 - 3 \div 1 = 21$

II.  $6 \times 9 + 7 - 8 \div 2 = 51$

After interchanging + and - the equations become -

**First equation:**  $4 \times 6 - 7 + 3 \div 1 = 21$

Solving the L.H.S. of the equation -

$$= 4 \times 6 - 7 + 3 \div 1$$

$$= 4 \times 6 - 7 + 3$$

$$= 24 - 7 + 3$$

$$= 17 + 3 = 20$$

$$= 20 \neq 21$$

**Second equation:**  $6 \times 9 - 7 + 8 \div 2 = 51$

$$\begin{aligned} & \text{Solving the L.H.S. of the equation -} \\ & = 6 \times 9 - 7 + 8 \div 2 \\ & = 6 \times 9 - 7 + 4 \\ & = 54 - 7 + 4 \\ & = 51 = 51 \\ & \Rightarrow \text{L.H.S} = \text{R.H.S.} \end{aligned}$$

So, the first equation doesn't satisfy the R.H.S. of the equation.  
Hence, the **first option** is correct.

**Q.**  
**109**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$24 \div 15 \times 16 + 4 - 18 = 66$$

**Option 1:**

$\div$  and  $\times$

**Option 2:**

$-$  and  $+$

**Option 3:**

$-$  and  $\times$

**Option 4:**

$\div$  and  $+$

**Correct Answer:**

÷ and +

**Solution:**

**Given:**

$$24 \div 15 \times 16 + 4 - 18 = 66$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** ÷ and ×

Solving the L.H.S. of the equation –

$$= 24 \times 15 \div 16 + 4 - 18$$

$$= 22.5 - 14$$

$$= 8.5 \neq 66$$

**Second option:** – and +

Solving the L.H.S. of the equation –

$$= 24 \div 15 \times 16 - 4 + 18$$

$$= 1.6 \times 16 - 4 + 18$$

$$= 25.6 + 14$$

$$= 39.6 \neq 66$$

**Third option:** – and ×

Solving the L.H.S. of the equation –

$$= 24 \div 15 - 16 + 4 \times 18$$

$$= 1.6 - 16 + 72$$

$$= 57.6 \neq 66$$

**Fourth option:** ÷ and +

Solving the L.H.S. of the equation –

$$= 24 + 15 \times 16 \div 4 - 18$$

$$\begin{aligned} &= 24 + 15 \times 4 - 18 \\ &= 24 + 60 - 18 \\ &= 66 = \text{R.H.S.} \end{aligned}$$

So, only the fourth option satisfies the R.H.S. of the given equation.  
Hence, the **fourth option** is correct.

**Q.  
110**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$11 \times 2 + 15 \div 13 - 3 = 14$$

**Option 1:**

14 and 15

**Option 2:**

3 and 2

**Option 3:**

13 and 3

**Option 4:**

11 and 15

**Correct Answer:**

13 and 3

**Solution:**

**Given:**

$$11 \times 2 + 15 \div 13 - 3 = 14$$

Let's check the given options -

**First Option:** 14 and 15

$$\Rightarrow 11 \times 2 + 14 \div 13 - 3 = 15$$

Solving the L.H.S. of the equation -

$$= 11 \times 2 + 1.07 - 3$$

$$= 22 + 1.07 - 3$$

$$= 20.07 \neq 15$$

**Second option:** 3 and 2

$$\Rightarrow 11 \times 3 + 15 \div 13 - 2 = 14$$

Solving the L.H.S. of the equation -

$$= 11 \times 3 + 1.15 - 2$$

$$= 33 + 1.15 - 2$$

$$= 32.15 \neq 14$$

**Third option:** 13 and 3

$$\Rightarrow 11 \times 2 + 15 \div 3 - 13 = 14$$

Solving the L.H.S. of the equation -

$$= 11 \times 2 + 5 - 13$$

$$= 22 + 5 - 13$$

$$= 14 = \text{R.H.S.}$$

**Fourth option:** 11 and 15

$$\Rightarrow 15 \times 2 + 11 \div 13 - 3 = 14$$

Solving the L.H.S. of the equation -

$$= 15 \times 2 + 0.84 - 3$$

$$= 30 + 0.84 - 3$$

$$= 27.84 \neq 14$$

So, only the third option satisfies the given equation. Hence, the **third option** is correct.

**Q.  
111**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$9 + 30 \times 15 - 18 \div 6 = 274$$

**Option 1:**

18 and 9

**Option 2:**

30 and 18

**Option 3:**

15 and 18

**Option 4:**

9 and 30

**Correct Answer:**

30 and 18

**Solution:**

**Given:**

$$9 + 30 \times 15 - 18 \div 6 = 274$$

Let's check the given options –

**First Option:** 18 and 9

$$\Rightarrow 18 + 30 \times 15 - 9 \div 6 = 274$$

Solving the L.H.S. of the equation –

$$= 18 + 30 \times 15 - 1.5$$

$$= 18 + 450 - 1.5$$

$$= 466.5 \neq 274$$

**Second option:** 30 and 18

$$\Rightarrow 9 + 18 \times 15 - 30 \div 6 = 274$$

Solving the L.H.S. of the equation –

$$= 9 + 18 \times 15 - 5$$

$$= 9 + 270 - 5$$

$$= 274 = \text{R.H.S.}$$

**Third option:** 15 and 18

$$\Rightarrow 9 + 30 \times 18 - 15 \div 6 = 274$$

Solving the L.H.S. of the equation –

$$= 9 + 30 \times 18 - 2.5$$

$$= 9 + 540 - 2.5$$

$$= 546.5 \neq 274$$

**Fourth option:** 9 and 30

$$\Rightarrow 30 + 9 \times 15 - 18 \div 6 = 274$$

Solving the L.H.S. of the equation –

$$= 30 + 9 \times 15 - 3$$

$$= 30 + 135 - 3$$

$$= 162 \neq 274$$

So, only the second option satisfies the given equation. Hence, the **second option** is correct.

**Q.  
112**

**Directions:** By Interchanging which two signs the equation will be correct?

$$6 - 10 \times 8 \div 5 + 7 = 15$$

**Option 1:**

+ and -

**Option 2:**

÷ and -

**Option 3:**

+ and ÷

**Option 4:**

× and ÷

**Correct Answer:**

+ and -

**Solution:**

**Given:**

$$6 - 10 \times 8 \div 5 + 7 = 15$$

Let's check the given options -

**First option:** + and -

On interchanging the mathematical signs, we get -

$$6 + 10 \times 8 \div 5 - 7 = 15$$

Solving the L.H.S. of the given equation –

$$= 6 + 10 \times 8 \div 5 - 7$$

$$= 6 + 16 - 7$$

$$= 22 - 7$$

$$= 15 = \text{R.H.S.}$$

**Second option:**  $\div$  and  $-$

On interchanging the mathematical signs, we get –

$$6 \div 10 \times 8 - 5 + 7 = 15$$

Solving the L.H.S. of the given equation –

$$= 6 \div 10 \times 8 - 5 + 7$$

$$= 4.8 - 5 + 7$$

$$= 11.8 - 5$$

$$= 6.8 \neq 15$$

**Third option:**  $+$  and  $\div$

On interchanging the mathematical signs, we get –

$$6 - 10 \times 8 + 5 \div 7 = 15$$

Solving the L.H.S. of the given equation –

$$= 6 - 10 \times 8 + 5 \div 7$$

$$= 6 - 10 \times 8 + 0.71$$

$$= 6 - 80 + 0.71$$

$$= 6.71 - 80$$

$$= -73.29 \neq 15$$

**Fourth option:**  $\times$  and  $\div$

On interchanging the mathematical signs, we get –

$$6 - 10 \div 8 \times 5 + 7 = 15$$

Solving the L.H.S. of the given equation –

$$= 6 - 10 \div 8 \times 5 + 7$$

$$= 6 - 6.25 + 7$$

$$= 13 - 6.25$$

$$= 6.75 \neq 15$$

So, only the first option satisfies the given equation. Hence, the **first option** is correct.

**Q.  
113**

**Directions:** After interchanging the given two numbers what will be the values of equations (I) and (II) respectively?

8 and 2

I.  $3 + 6 - 8 \times 4 \div 2$

II.  $12 \div 6 \times 9 - 2 + 8$

**Option 1:**

12 and 8

**Option 2:**

9 and 15

**Option 3:**

9 and 81

**Option 4:**

8 and 12

**Correct Answer:**

8 and 12

**Solution:**

**Equation I.**  $3 + 6 - 8 \times 4 \div 2$

On interchanging the numbers, we get -

$$= 3 + 6 - 2 \times 4 \div 8$$

$$= 3 + 6 - 2 \times 0.5$$

$$= 3 + 6 - 1$$

$$= 9 - 1$$

$$= 8$$

**Equation II.**  $12 \div 6 \times 9 - 2 + 8$

On interchanging the numbers, we get -

$$= 12 \div 6 \times 9 - 8 + 2$$

$$= 2 \times 9 - 8 + 2$$

$$= 18 - 8 + 2$$

$$= 20 - 8$$

$$= 12$$

So, the values are 8 and 12. Hence, the **fourth option** is correct.

**Q.**  
**114**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$4 \times 2 - 3 + 5 = 7$$

**Option 1:**

3 and 4

**Option 2:**

4 and 5

**Option 3:**

7 and 5

**Option 4:**

2 and 7

**Correct Answer:**

3 and 4

**Solution:**

**Given:**

$$4 \times 2 - 3 + 5 = 7$$

Let's check the options –

**First option:** 3 and 4

$$3 \times 2 - 4 + 5 = 7$$

$$6 - 4 + 5 = 7$$

$$7 = 7 \text{ (L.H.S. = R.H.S.)}$$

**Second option:** 4 and 5

$$5 \times 2 - 3 + 4 = 7$$

$$10 - 3 + 4 = 7$$

$$11 \neq 7$$

**Third option:** 7 and 5

$$4 \times 2 - 3 + 7 = 5$$

$$8 - 3 + 7 = 5$$

$$12 \neq 7$$

**Fourth option:** 2 and 7

$$4 \times 7 - 3 + 5 = 2$$

$$28 - 3 + 5 = 2$$

$$30 \neq 2$$

So, by interchanging 3 and 4 equation becomes equal. Hence, the **first option** is correct.

**Q.**  
**115**

**Directions:** By interchanging the given two signs which of the following equations will NOT be correct?

× and -

I.  $4 \div 2 + 1 \times 6 - 3 = 13$

II.  $5 + 7 - 8 \times 2 \div 1 = 58$

**Option 1:**

Only II

**Option 2:**

Only I

**Option 3:**

Neither I nor II

**Option 4:**

Both I and II

**Correct Answer:**

Both I and II

**Solution:**

**Given:**

Interchange the signs  $\times$  and  $-$ .

I.  $4 \div 2 + 1 \times 6 - 3 = 13$

After interchanging the signs the equation becomes -

$$4 \div 2 + 1 - 6 \times 3 = 13$$

$$\text{L.H.S.} \rightarrow 2 + 1 - 18$$

$$= -15 \neq 13$$

II.  $5 + 7 - 8 \times 2 \div 1 = 58$

After interchanging the signs the equation becomes -

$$5 + 7 \times 8 - 2 \div 1 = 58$$

$$\text{L.H.S.} \rightarrow 5 + 7 \times 8 - 2$$

$$5 + 56 - 2$$

$$= 59 \neq 58$$

So, both the equations are incorrect. Hence, the **fourth option** is correct.

**Q.**  
**116**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$8 \times 4 - 3 + 57 \div 9 = 42$$

**Option 1:**

8 and 4

**Option 2:**

3 and 9

**Option 3:**

57 and 9

**Option 4:**

42 and 57

**Correct Answer:**

3 and 9

**Solution:**

**Given:**

$$8 \times 4 - 3 + 57 \div 9 = 42$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 8 and 4

$$\Rightarrow 4 \times 8 - 3 + 57 \div 9 = 42$$

Solving the L.H.S. of the equation –

$$= 4 \times 8 - 3 + 6.34$$

$$= 32 - 3 + 6.34$$

$$= 35.34 \neq 42$$

**Second option:** 3 and 9

$$\Rightarrow 8 \times 4 - 9 + 57 \div 3 = 42$$

$$\begin{aligned}
 &\text{Solving the L.H.S. of the equation -} \\
 &= 8 \times 4 - 9 + 19 \\
 &= 32 - 9 + 19 \\
 &= 42 = \text{R.H.S.}
 \end{aligned}$$

**Third option:** 57 and 9

$$\Rightarrow 8 \times 4 - 3 + 9 \div 57 = 42$$

$$\begin{aligned}
 &\text{Solving the L.H.S. of the equation -} \\
 &= 8 \times 4 - 3 + 0.16 \\
 &= 32 - 3 + 0.16 \\
 &= 29.16 \neq 42
 \end{aligned}$$

**Fourth option:** 42 and 57

$$\Rightarrow 8 \times 4 - 3 + 42 \div 9 = 57$$

$$\begin{aligned}
 &\text{Solving the L.H.S. of the equation -} \\
 &= 8 \times 4 - 3 + 4.67 \\
 &= 32 - 3 + 4.67 \\
 &= 33.67 \neq 57
 \end{aligned}$$

So, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct.

**Q.  
117**

**Directions:** After interchanging the given two numbers what will be the values of equations (I) and (II) respectively?

7 and 8

I.  $5 \times 7 + 6 \div 2 - 8$

II.  $8 + 3 \times 7 - 5 \div 1$

**Option 1:**

36 and 26

**Option 2:**

20 and 18

**Option 3:**

36 and 16

**Option 4:**

20 and 19

**Correct Answer:**

36 and 26

**Solution:**

**Given:**

7 and 8 are interchanged –

I.  $5 \times 7 + 6 \div 2 - 8 = ?$

II.  $8 + 3 \times 7 - 5 \div 1 = ?$

For equation I –

After interchanging the given mathematical numbers, we get –

$$\Rightarrow 5 \times 8 + 6 \div 2 - 7$$

$$\Rightarrow 5 \times 8 + 3 - 7$$

$$\Rightarrow 40 + 3 - 7$$

$$= 36$$

For equation II –

After interchanging the given mathematical numbers, we get –

$$\begin{aligned} &\Rightarrow 7 + 3 \times 8 - 5 \div 1 \\ &\Rightarrow 7 + 3 \times 8 - 5 \\ &\Rightarrow 7 + 24 - 5 \\ &= 26 \end{aligned}$$

So, 36 and 26 are the answers to the given equations I and II respectively. Hence, the **first option** is correct.

**Q. 118**

**Directions:** After interchanging two signs and two numbers, the value of the given equation will be 44.

$$6 \times 7 + 9 + 3 - 8$$

**Option 1:**

+ and  $\div$ , 7 and 8

**Option 2:**

+ and  $-$ , 6 and 8

**Option 3:**

$\times$  and  $+$ , 8 and 6

**Option 4:**

$\times$  and  $\div$ , 9 and 6

**Correct Answer:**

+ and  $\div$ , 7 and 8

**Solution:**

**Given:**

$$6 \times 7 \div 9 + 3 - 8$$

Interchange the signs and numbers according to the given options.

**First option:** + and  $\div$ , 7 and 8

$$6 \times 8 + 9 \div 3 - 7$$

$$6 \times 8 + 3 - 7$$

$$48 + 3 - 7$$

$$= 44$$

**Second option:** + and -, 6 and 8

$$8 \times 7 \div 9 - 3 + 6$$

$$8 \times 0.777 - 3 + 6$$

$$9.222 \neq 44$$

**Third option:**  $\times$  and +, 8 and 6

$$8 + 7 \div 9 \times 3 - 6$$

$$8 + 0.777 \times 3 - 6$$

$$= 4.331 \neq 44$$

**Fourth option:**  $\times$  and  $\div$ , 9 and 6

$$9 \div 7 \times 6 + 3 - 8$$

$$1.28 \times 6 + 3 - 8$$

$$2.68 \neq 44$$

So, the first option satisfies the equation as it is equal to 44. Hence, the **first option** is correct.

**Q.  
119**

**Directions:** By interchanging two numbers the equation will be correct.

$$3 \times 9 - 4 \div 2 + 6 = 28$$

**Option 1:**

9 and 2

**Option 2:**

6 and 4

**Option 3:**

3 and 6

**Option 4:**

9 and 6

**Correct Answer:**

6 and 4

**Solution:**

**Given:**

$$3 \times 9 - 4 \div 2 + 6 = 28$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 9 and 2

$$= 3 \times 2 - 4 \div 9 + 6$$

$$= 6 - 0.45 + 6$$

$$= 11.56 \neq 28$$

**Second option:** 6 and 4

$$= 3 \times 9 - 6 \div 2 + 4$$

$$= 27 - 3 + 4$$

$$= 28$$

**Third option:** 3 and 6

$$= 6 \times 9 - 4 \div 2 + 3$$

$$= 54 - 2 + 3$$

$$= 55 \neq 28$$

**Fourth option:** 9 and 6

$$= 3 \times 6 - 4 \div 2 + 9$$

$$= 18 - 2 + 9$$

$$= 25 \neq 28$$

Here, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct.

**Q.  
120**

**Directions:** By Interchanging which two signs the equation will be correct?

$$21 - 7 \times 4 \div 10 + 2 = 4$$

**Option 1:**

- and ×

**Option 2:**

× and ÷

**Option 3:**

- and  $\div$

**Option 4:**

+ and -

**Correct Answer:**

- and  $\div$

**Solution:**

**Given:**

$$21 - 7 \times 4 \div 10 + 2 = 4$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** - and  $\times$

Solving the L.H.S. of the equation -

$$= 21 \times 7 - 4 \div 10 + 2$$

$$= 147 - 0.4 + 2$$

$$= 148.6 \neq 4$$

**Second option:**  $\times$  and  $\div$

Solving the L.H.S. of the equation -

$$= 21 - 7 \div 4 \times 10 + 2$$

$$= 21 - 17.5 + 2$$

$$= 5.5 \neq 4$$

**Third option:** - and  $\div$

Solving the L.H.S. of the equation -

$$= 21 \div 7 \times 4 - 10 + 2$$

$$= 12 - 10 + 2$$

$$= 4 = \text{R.H.S.}$$

**Fourth option:** + and –

Solving the L.H.S. of the equation –

$$= 21 + 7 \times 4 \div 10 - 2$$

$$= 21 + 2.8 - 2$$

$$= 21.8 \neq 4$$

So, only the third option satisfies the R.H.S. of the given equation.

Hence, the **third option** is correct.

**Q.  
121**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$8 - 9 + 24 \times 63 = 33$$

**Option 1:**

× and –

**Option 2:**

= and +

**Option 3:**

– and =

**Option 4:**

– and +

**Correct Answer:**

× and –

**Solution:****Given:**

$$8 - 9 + 24 \times 63 = 33$$

Let's check the given options -

**First option:**  $\times$  and  $-$ 

On interchanging the mathematical signs, we get -

$$8 \times 9 + 24 - 63 = 33$$

$$\text{L.H.S.} = 8 \times 9 + 24 - 63$$

$$= 72 + 24 - 63$$

$$= 96 - 63$$

$$= 33 = \text{R.H.S.}$$

**Second option:**  $=$  and  $+$ 

On interchanging the mathematical signs, we get -

$$8 - 9 = 24 \times 63 + 33$$

$$\text{L.H.S.} = 8 - 9 = -1$$

$$\text{R.H.S.} = 24 \times 63 + 33 = 1512 + 33$$

$$= -1 \neq 1545$$

**Third option:**  $-$  and  $=$ 

On interchanging the mathematical signs, we get -

$$8 = 9 + 24 \times 63 - 33$$

$$\text{R.H.S.} = 9 + 24 \times 63 - 33$$

$$= 9 + 1512 - 33$$

$$= 1521 - 33$$

$$= 1488 \neq 8$$

**Fourth option:**  $-$  and  $+$ 

On interchanging the mathematical signs, we get -

$$8 + 9 - 24 \times 63 = 33$$

$$\text{L.H.S.} = 8 + 9 - 24 \times 63$$

$$= 8 + 9 - 1512$$

$$= 17 - 1512$$

$$= -1495 \neq 33$$

So, only the first option satisfies the equation. Hence, the **first option** is correct.

**Q.  
122**

**Directions:** After interchanging the given two numbers, what will be the value of the given equation?

3 and 4;

$$3 \times 7 - 8 \div 2 + 4$$

**Option 1:**

30

**Option 2:**

27

**Option 3:**

31

**Option 4:**

35

**Correct Answer:**

27

**Solution:**

**Given:**

$$3 \times 7 - 8 \div 2 + 4 = ?$$

3 and 4 are interchanged -

After interchanging the given mathematical numbers, we get -

$$\Rightarrow 4 \times 7 - 8 \div 2 + 3$$

$$\Rightarrow 4 \times 7 - 4 + 3$$

$$\Rightarrow 28 - 4 + 3$$

$$= 27$$

So, 27

is the answer to the given equation. Hence, the **second option** is correct.

**Q.**  
**123**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$8 \div 2 \times 7 - 5 + 2 = 1$$

**Option 1:**

$\times$  and  $+$

**Option 2:**

$+$  and  $-$

**Option 3:**

$\times$  and  $-$

**Option 4:**

+ and =

**Correct Answer:**

× and +

**Solution:**

**Given:**

$$8 \div 2 \times 7 - 5 + 2 = 1$$

Let's check the options -

**First option:** × and +

Solving the L.H.S. of the equation -

$$8 \div 2 + 7 - 5 \times 2$$

$$= 4 + 7 - 5 \times 2$$

$$= 4 + 7 - 10$$

$$= 11 - 10$$

$$= 1 = \text{R.H.S.}$$

**Second option:** + and -

Solving the L.H.S. of the equation -

$$8 \div 2 \times 7 + 5 - 2$$

$$= 4 \times 7 + 5 - 2$$

$$= 28 + 5 - 2$$

$$= 31 \neq 1$$

**Third option:** × and -

Solving the L.H.S. of the equation -

$$8 \div 2 - 7 \times 5 + 2$$

$$= 4 - 7 \times 5 + 2$$

$$= 4 - 35 + 2$$

$$= -29 \neq 1$$

**Fourth option:** + and =

$$8 \div 2 \times 7 - 5 = 2 + 1$$

$$\text{L.H.S.} = 8 \div 2 \times 7 - 5$$

$$= 4 \times 7 - 5$$

$$= 28 - 5$$

$$= 23$$

$$\text{R.H.S.} = 2 + 1 = 3$$

$$23 \neq 3$$

So, only the first option satisfies the R.H.S. of the given equation.  
Hence, the **first option** is correct.

**Q.  
124**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$16 + 24 \times 12 - 25 + 6 = 298$$

**Option 1:**

25 and 24

**Option 2:**

25 and 12

**Option 3:**

25 and 16

**Option 4:**

24 and 16

**Correct Answer:**

25 and 24

**Solution:**

**Given:**

$$16 + 24 \times 12 - 25 + 6 = 298$$

Let's check the options -

**First option:** 25 and 24

$$16 + 25 \times 12 - 24 + 6 = 298$$

Solving the L.H.S. of the equation -

$$= 16 + 300 - 24 + 6$$

$$= 298 = \text{R.H.S.}$$

**Second option:** 25 and 12

$$16 + 24 \times 25 - 12 + 6 = 298$$

Solving the L.H.S. of the equation -

$$= 16 + 600 - 12 + 6$$

$$= 610 \neq 298$$

**Third option:** 25 and 16

$$25 + 24 \times 12 - 16 + 6 = 298$$

Solving the L.H.S. of the equation -

$$= 25 + 288 - 16 + 6$$

$$= 303 \neq 298$$

**Fourth option:** 24 and 16

$$24 + 16 \times 12 - 25 + 6 = 298$$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 24 + 192 - 25 + 6 \\ &= 197 \neq 298 \end{aligned}$$

So, only the first option satisfies the R.H.S. of the equation. Hence, the **first option** is correct.

**Q.**  
**125**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$6 \div 48 + 12 \times 9 - 7 = 35$$

**Option 1:**

$\div$  and  $+$

**Option 2:**

$\div$  and  $\times$

**Option 3:**

$\times$  and  $-$

**Option 4:**

$\times$  and  $+$

**Correct Answer:**

$\div$  and  $+$

**Solution:****Given:**

$$6 \div 48 + 12 \times 9 - 7 = 35$$

Let's check the options -

**First option:**  $\div$  and  $+$ 

$$6 + 48 \div 12 \times 9 - 7 = 35$$

$$\text{L.H.S.} = 6 + 48 \div 12 \times 9 - 7$$

$$= 6 + 4 \times 9 - 7$$

$$= 6 + 36 - 7$$

$$= 35 = \text{R.H.S.}$$

**Second option:**  $\div$  and  $\times$ 

$$6 \times 48 + 12 \div 9 - 7 = 35$$

$$\text{L.H.S.} = 6 \times 48 + 12 \div 9 - 7$$

$$= 6 \times 48 + 1.33 - 7$$

$$= 288 + 1.33 - 7$$

$$= 282.33 \neq 35$$

**Third option:**  $\times$  and  $-$ 

$$6 \div 48 + 12 - 9 \times 7 = 35$$

$$\text{L.H.S.} = 6 \div 48 + 12 - 9 \times 7$$

$$= 0.125 + 12 - 9 \times 7$$

$$= 0.125 + 12 - 63$$

$$= -50.875 \neq 35$$

**Fourth option:**  $\times$  and  $+$ 

$$6 \div 48 \times 12 + 9 - 7 = 35$$

$$\text{L.H.S.} = 6 \div 48 \times 12 + 9 - 7$$

$$= 0.125 \times 12 + 9 - 7$$

$$= 1.5 + 9 - 7$$

$$= 3.5 \neq 35$$

So, only the first option satisfies the R.H.S. of the given equation.  
Hence, the **first option** is correct.

**Q.  
126**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$7 \times 2 + 4 - 6 \div 3 = 12$$

**Option 1:**

× and –

**Option 2:**

= and ×

**Option 3:**

– and +

**Option 4:**

– and =

**Correct Answer:**

– and +

**Solution:**

**Given:**

$$7 \times 2 + 4 - 6 \div 3 = 12$$

Let's check the options -

**First option:**  $\times$  and  $-$

$$7 - 2 + 4 \times 6 \div 3 = 12$$

$$\text{L.H.S.} = 7 - 2 + 4 \times 2$$

$$= 7 - 2 + 8$$

$$= 15 - 2$$

$$= 13 \neq 12$$

**Second option:**  $=$  and  $\times$

$$7 = 2 + 4 - 6 \div 3 \times 12$$

$$\text{L.H.S.} = 7$$

$$\text{R.H.S.} = 2 + 4 - 6 \div 3 \times 12$$

$$= 2 + 4 - 2 \times 12$$

$$= 2 + 4 - 24$$

$$= 6 - 24$$

$$= -18 \neq 7$$

**Third option:**  $-$  and  $+$

$$7 \times 2 - 4 + 6 \div 3 = 12$$

$$\text{L.H.S.} = 7 \times 2 - 4 + 6 \div 3$$

$$= 7 \times 2 - 4 + 2$$

$$= 14 - 4 + 2$$

$$= 12 = \text{R.H.S.}$$

**Fourth option:**  $-$  and  $=$

$$7 \times 2 + 4 = 6 \div 3 - 12$$

$$\text{L.H.S.} = 7 \times 2 + 4$$

$$= 14 + 4$$

$$= 18$$

$$\text{R.H.S.} = 6 \div 3 - 12$$

$$= 2 - 12$$

$$= -10$$

$$\Rightarrow 18 \neq -10$$

So, only the third option satisfies the R.H.S. of the given equation.  
Hence, the **third option** is correct.

**Q.  
127**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$13 - 25 = 5 + 4 \div 12$$

**Option 1:**

+ and =

**Option 2:**

- and =

**Option 3:**

+ and -

**Option 4:**

$\div$  and =

**Correct Answer:**

$\div$  and =

**Solution:**

**Given:**

$$13 - 25 = 5 + 4 \div 12$$

On interchanging the symbols as given in the options, we get -

**First option:** + and =

$$13 - 25 + 5 = 4 \div 12$$

$$\text{L.H.S.} = 13 - 25 + 5 = -7$$

$$\text{R.H.S.} = 4 \div 12 = 0.33$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Second option:** - and =

$$13 = 25 - 5 + 4 \div 12$$

$$\text{L.H.S.} = 13$$

$$\text{R.H.S.} = 25 - 5 + 4 \div 12$$

$$= 25 - 5 + 0.33 = 20.33$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Third option:** + and -

$$13 + 25 = 5 - 4 \div 12$$

$$\text{L.H.S.} = 13 + 25 = 38$$

$$\text{R.H.S.} = 5 - 4 \div 12$$

$$= 5 - 0.33 = 4.67$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Fourth option:**  $\div$  and =

$$13 - 25 \div 5 + 4 = 12$$

$$\text{L.H.S.} = 13 - 25 \div 5 + 4$$

$$= 13 - 5 + 4 = 12$$

$$\text{R.H.S.} = 12$$

$$\text{L.H.S.} = \text{R.H.S.}$$

So, only the fourth option satisfies the R.H.S. of the given equation.  
Hence, the **fourth option** is correct.

**Q.  
128**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$9 \times 4 + 6 \div 3 - 5 = 39$$

**Option 1:**

÷ and -

**Option 2:**

× and +

**Option 3:**

- and +

**Option 4:**

- and =

**Correct Answer:**

- and +

**Solution:**

**Given:**

$$9 \times 4 + 6 \div 3 - 5 = 39$$

On interchanging the symbols as given in the options, we get –

**First option:**  $\div$  and  $-$

$$9 \times 4 + 6 - 3 \div 5 = 39$$

Solving the L.H.S. of the equation –

$$= 9 \times 4 + 6 - 0.6$$

$$= 36 + 6 - 0.6$$

$$= 41.4 \neq 39$$

**Second option:**  $\times$  and  $+$

$$9 + 4 \times 6 \div 3 - 5 = 39$$

Solving the L.H.S. of the equation –

$$= 9 + 4 \times 2 - 5$$

$$= 9 + 8 - 5$$

$$= 12 \neq 39$$

**Third option:**  $-$  and  $+$

$$9 \times 4 - 6 \div 3 + 5 = 39$$

Solving the L.H.S. of the equation –

$$= 9 \times 4 - 2 + 5$$

$$= 36 - 2 + 5$$

$$= 39 = \text{R.H.S.}$$

**Fourth option:**  $-$  and  $=$

$$9 \times 4 + 6 \div 3 = 5 - 39$$

Solving the L.H.S. of the equation –

$$= 9 \times 4 + 6 \div 3$$

$$= 9 \times 4 + 2$$

$$= 36 + 2$$

$$= 38$$

$$\text{R.H.S.} = 5 - 39 = -34$$

$$38 \neq -34$$

So, only the third option satisfies the R.H.S. of the given equation. Hence, the **third option** is correct.

**Q.  
129**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$12 \times 4 - 8 + 9 \div 3 = 32$$

**Option 1:**

4 and 9

**Option 2:**

12 and 3

**Option 3:**

12 and 9

**Option 4:**

32 and 12

**Correct Answer:**

12 and 9

**Solution:**

**Given:**

$$12 \times 4 - 8 + 9 \div 3 = 32$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 4 and 9

$$\Rightarrow 12 \times 9 - 8 + 4 \div 3 = 32$$

Solving the L.H.S. of the equation -

$$= 12 \times 9 - 8 + 1.34$$

$$= 108 - 8 + 1.34$$

$$= 101.34 \neq 32$$

**Second option:** 12 and 3

$$\Rightarrow 3 \times 4 - 8 + 9 \div 12 = 32$$

Solving the L.H.S. of the equation -

$$= 3 \times 4 - 8 + 0.75$$

$$= 12 - 8 + 0.75$$

$$= 4.75 \neq 32$$

**Third option:** 12 and 9

$$\Rightarrow 9 \times 4 - 8 + 12 \div 3 = 32$$

Solving the L.H.S. of the equation -

$$= 9 \times 4 - 8 + 4$$

$$= 36 - 8 + 4$$

$$= 32 = \text{R.H.S.}$$

**Fourth option:** 32 and 12

$$\Rightarrow 32 \times 4 - 8 + 9 \div 3 = 12$$

Solving the L.H.S. of the equation -

$$= 32 \times 4 - 8 + 3$$

$$= 128 - 8 + 3$$

$$= 123 \neq 12$$

So, only the third option satisfies the R.H.S. of the given equation.

Hence, the **third option** is correct.

**Q.  
130**

**Directions:** After interchanging the given two numbers what will be the values of equations (I) and (II) respectively?

8 and 4

I.  $8 - 4 \times 6 \div 3 + 7$

II.  $8 \times 3 - 6 \div 2 + 4$

**Option 1:**

-5 and 20

**Option 2:**

-4 and 18

**Option 3:**

-5 and 17

**Option 4:**

20 and 18

**Correct Answer:**

-5 and 17

**Solution:**

**Given:**

I.  $8 - 4 \times 6 \div 3 + 7$

II.  $8 \times 3 - 6 \div 2 + 4$

On interchanging 8 and 4 in the above equations we get –

**Equation I:**  $4 - 8 \times 6 \div 3 + 7$

$$= 4 - 8 \times 2 + 7$$

$$= 4 - 16 + 7$$

$$= -5$$

**Equation II:**  $4 \times 3 - 6 \div 2 + 8$

$$= 4 \times 3 - 3 + 8$$

$$= 12 - 3 + 8$$

$$= 17$$

So, the values are -5 and 17 respectively for equations (I) and (II).  
Hence, the **third option** is correct.

**Q.  
131**

**Directions:** After interchanging the given two signs,  
what will be the value of the given equation?

× and ÷

$$25 + 5 \times 35 \div 7 - 26$$

**Option 1:**

0

**Option 2:**

10

**Option 3:**

50

**Option 4:**

51

**Correct Answer:**

0

**Solution:**

**Given:**

$$25 + 5 \times 35 \div 7 - 26 = ?$$

$\times$  and  $\div$  are interchanged -

After interchanging the given mathematical signs, we get -

$$\Rightarrow 25 + 5 \div 35 \times 7 - 26$$

$$\Rightarrow 25 + 0.142857 \times 7 - 26$$

$$\Rightarrow 25 + 1 - 26$$

$$= 0$$

So, 0 is the answer to the given equation. Hence, the **first option** is correct.

**Q.  
132**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$7 \text{ A } (18 \text{ D } 3) \text{ C } 5 = ?$$

**Option 1:**

5

**Option 2:**

13

**Option 3:**

18

**Option 4:**

8

**Correct Answer:**

8

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$7 \text{ A } (18 \text{ D } 3) \text{ C } 5 = ?$$

As given above interchange the alphabets with given expressions.

$$7 + (18 \div 3) - 5$$

$$= 7 + 6 - 5$$

$$= 8$$

So, the required answer is 8. Hence, the **fourth option** is correct.

**Q.  
133**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$45 - 6 + 108 \div 12 \times 14 = 5$$

**Option 1:**

$\div$  and  $-$

**Option 2:**

$\times$  and  $-$

**Option 3:**

$+$  and  $\times$

**Option 4:**

$+$  and  $-$

**Correct Answer:**

$+$  and  $\times$

**Solution:**

**Given:**

$$45 - 6 + 108 \div 12 \times 14 = 5$$

On interchanging the symbols, we get -

**First option:**  $\div$  and  $-$

$$45 \div 6 + 108 - 12 \times 14 = 5$$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 7.5 + 108 - 12 \times 14 \\ &= 7.5 + 108 - 168 \\ &= -52.5 \neq 5 \end{aligned}$$

**Second option:**  $\times$  and  $-$   
 $45 \times 6 + 108 \div 12 - 14 = 5$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 45 \times 6 + 9 - 14 \\ &= 270 + 9 - 14 \\ &= 265 \neq 5 \end{aligned}$$

**Third option:**  $+$  and  $\times$   
 $45 - 6 \times 108 \div 12 + 14 = 5$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 45 - 6 \times 9 + 14 \\ &= 45 - 54 + 14 \\ &= 59 - 54 \\ &= 5 = \text{R.H.S.} \end{aligned}$$

**Fourth option:**  $+$  and  $-$   
 $45 + 6 - 108 \div 12 \times 14 = 5$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 45 + 6 - 9 \times 14 \\ &= 45 + 6 - 126 \\ &= -75 \neq 5 \end{aligned}$$

So, only the third option satisfies the equation. Hence, the **third option** is correct.

**Q.  
134**

**Directions:** By Interchanging the given two numbers which of the following equations will be correct?

5 and 4

I.  $4 + 8 \times 5 - 7 \div 1 = 30$

II.  $5 \times 3 - 4 + 6 \div 2 = 11$

**Option 1:**

Both I and II

**Option 2:**

Neither I nor II

**Option 3:**

Only II

**Option 4:**

Only I

**Correct Answer:**

Only I

**Solution:**

**Given:**

I.  $4 + 8 \times 5 - 7 \div 1 = 30$

II.  $5 \times 3 - 4 + 6 \div 2 = 11$

Interchanging the numbers 5 and 4.

**Equation I:**  $4 + 8 \times 5 - 7 \div 1 = 30$

$$\Rightarrow 5 + 8 \times 4 - 7 \div 1 = 30$$

$$= 5 + 8 \times 4 - 7$$

$$= 5 + 32 - 7$$

$$= 37 - 7$$

$$= 30 = \text{R.H.S.}$$

**Equation II:**  $5 \times 3 - 4 + 6 \div 2 = 11$

$$\Rightarrow 4 \times 3 - 5 + 6 \div 2 = 11$$

$$= 4 \times 3 - 5 + 3$$

$$= 12 - 5 + 3$$

$$= 10 \neq 11$$

So, only equation I satisfies the R.H.S. Hence, the **fourth option** is correct.

**Q.  
135**

**Directions:** By Interchanging which two signs the equation will be correct?

$$27 \div 3 - 18 + 3 \times 2 = 18$$

**Option 1:**

+ and -

**Option 2:**

× and +

**Option 3:**

+ and ÷

**Option 4:**

$\div$  and  $\times$

**Correct Answer:**

$+$  and  $\div$

**Solution:**

**Given:**

$$27 \div 3 - 18 + 3 \times 2 = 18$$

Let's check the given options -

**First option:**  $+$  and  $-$

On interchanging the mathematical signs, we get -

$$27 \div 3 + 18 - 3 \times 2 = 18$$

Solving the L.H.S. of the given equation -

$$= 27 \div 3 + 18 - 3 \times 2$$

$$= 9 + 18 - 3 \times 2$$

$$= 9 + 18 - 6$$

$$= 21 \neq 18$$

**Second option:**  $\times$  and  $+$

On interchanging the mathematical signs, we get -

$$27 \div 3 - 18 \times 3 + 2 = 18$$

Solving the L.H.S. of the given equation -

$$= 27 \div 3 - 18 \times 3 + 2$$

$$= 9 - 18 \times 3 + 2$$

$$= 9 - 54 + 2$$

$$= -43 \neq 18$$

**Third option:**  $+$  and  $\div$

On interchanging the mathematical signs, we get -

$$27 + 3 - 18 \div 3 \times 2 = 18$$

Solving the L.H.S. of the given equation –

$$= 27 + 3 - 18 \div 3 \times 2$$

$$= 27 + 3 - 6 \times 2$$

$$= 27 + 3 - 12$$

$$= 18 = \text{R.H.S.}$$

**Fourth option:**  $\div$  and  $\times$

On interchanging the mathematical signs, we get –

$$27 \times 3 - 18 + 3 \div 2 = 18$$

Solving the L.H.S. of the given equation –

$$= 27 \times 3 - 18 + 3 \div 2$$

$$= 27 \times 3 - 18 + 1.5$$

$$= 81 - 18 + 1.5$$

$$= 64.5 \neq 18$$

So, only the third option satisfies the R.H.S. of the equation. Hence, the **third option** is correct.

**Q.  
136**

**Directions:** After interchanging the given two signs and two numbers, what will be the value of the given equation?

+ and –, 7 and 9

$$8 \times 7 + 9 \div 1 - 5$$

**Option 1:**

70

**Option 2:**

60

**Option 3:**

40

**Option 4:**

10

**Correct Answer:**

70

**Solution:**

**Given:**

$$8 \times 7 + 9 \div 1 - 5$$

On interchanging the signs and numbers given in the equation, the equation becomes –

$$= 8 \times 9 - 7 \div 1 + 5$$

$$= 8 \times 9 - 7 + 5$$

$$= 72 - 7 + 5$$

$$= 70$$

So, the equation is equal to 70. Hence, the **first option** is correct.

**Q.  
137**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$44 \div 11 + 7 \times 3 - 19 = 2$$

**Option 1:**

+ and  $\div$

**Option 2:**

- and +

**Option 3:**

= and  $\div$

**Option 4:**

- and =

**Correct Answer:**

- and +

**Solution:**

**Given:**

$$44 \div 11 + 7 \times 3 - 19 = 2$$

Let's check the given options -

**First option:** + and  $\div$

On interchanging the mathematical signs, we get -

$$44 + 11 \div 7 \times 3 - 19 = 2$$

$$\text{L.H.S.} = 44 + 11 \div 7 \times 3 - 19$$

$$= 44 + 4.71 - 19$$

$$= 29.71 \neq 2$$

**Second option:** - and +

On interchanging the mathematical signs, we get -

$$44 \div 11 - 7 \times 3 + 19 = 2$$

$$\begin{aligned}
 \text{L.H.S.} &= 44 \div 11 - 7 \times 3 + 19 \\
 &= 4 - 7 \times 3 + 19 \\
 &= 4 - 21 + 19 \\
 &= 2 = \text{R.H.S.}
 \end{aligned}$$

**Third option:** = and  $\div$

On interchanging the mathematical signs, we get -

$$44 = 11 + 7 \times 3 - 19 \div 2$$

$$\text{R.H.S.} = 11 + 7 \times 3 - 19 \div 2$$

$$= 11 + 7 \times 3 - 9.5$$

$$= 11 + 21 - 9.5$$

$$= 44 \neq 22.5$$

**Fourth option:** - and =

On interchanging the mathematical signs, we get -

$$44 \div 11 + 7 \times 3 = 19 - 2$$

$$\text{L.H.S.} = 44 \div 11 + 7 \times 3$$

$$= 4 + 7 \times 3$$

$$= 4 + 21 = 25$$

$$\text{R.H.S.} = 19 - 2$$

$$= 17$$

$$= 25 \neq 17$$

So, only the second option satisfies the R.H.S. of the equation.

Hence, the **second option** is correct.

**Q.  
138**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$84 \div 6 + 16 - 14 \times 2 = 10$$

**Option 1:**

6 and 14

**Option 2:**

2 and 84

**Option 3:**

10 and 14

**Option 4:**

6 and 10

**Correct Answer:**

6 and 14

**Solution:**

**Given:**

$$84 \div 6 + 16 - 14 \times 2 = 10$$

Let's check the given options -

**First option:** 6 and 14

On interchanging the numbers, we get -

$$84 \div 14 + 16 - 6 \times 2 = 10$$

Solving the L.H.S. of the given equation -

$$= 84 \div 14 + 16 - 6 \times 2$$

$$= 6 + 16 - 6 \times 2$$

$$= 6 + 16 - 12$$

$$= 10$$

**Second option:** 2 and 84

On interchanging the numbers, we get –

$$2 \div 6 + 16 - 14 \times 84 = 10$$

Solving the L.H.S. of the given equation –

$$= 2 \div 6 + 16 - 14 \times 84$$

$$= 0.33 + 16 - 14 \times 84$$

$$= 0.33 + 16 - 1176$$

$$= -1159.67 \neq 10$$

**Third option:** 10 and 14

On interchanging the numbers, we get –

$$84 \div 6 + 16 - 10 \times 2 = 14$$

Solving the L.H.S. of the given equation –

$$= 84 \div 6 + 16 - 10 \times 2$$

$$= 14 + 16 - 10 \times 2$$

$$= 14 + 16 - 20$$

$$= 10 \neq 14$$

**Fourth option:** 6 and 10

On interchanging the numbers, we get –

$$84 \div 10 + 16 - 14 \times 2 = 6$$

Solving the L.H.S. of the given equation –

$$= 84 \div 10 + 16 - 14 \times 2$$

$$= 8.4 + 16 - 14 \times 2$$

$$= 8.4 + 16 - 28$$

$$= -3.6 \neq 6$$

So, only the first option satisfies the R.H.S. of the equation. Hence, the **first option** is correct.

**Q.  
139**

**Directions:** After interchanging the given two signs what will be the values of equation (I) and (II) respectively?

× and –

I.  $18 \times 8 - 6 \div 3 + 4$

II.  $7 - 8 \times 4 \div 2 + 15$

**Option 1:**

89 and 6

**Option 2:**

6 and 69

**Option 3:**

18 and 10

**Option 4:**

-8 and 10

**Correct Answer:**

6 and 69

**Solution:**

**Given:**

I.  $18 \times 8 - 6 \div 3 + 4$

II.  $7 - 8 \times 4 \div 2 + 15$

**Equation I:**  $18 \times 8 - 6 \div 3 + 4$

On interchanging the mathematical signs, we get –

$$= 18 - 8 \times 6 \div 3 + 4$$

$$= 18 - 8 \times 2 + 4$$

$$= 18 - 16 + 4$$

$$= 6$$

**Equation II:**  $7 - 8 \times 4 \div 2 + 15$

On interchanging the mathematical signs, we get –

$$= 7 \times 8 - 4 \div 2 + 15$$

$$= 7 \times 8 - 2 + 15$$

$$= 56 - 2 + 15$$

$$= 69$$

So, the values are 6 and 69. Hence, the **second option** is correct.

**Q.**  
**140**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$5 \times 7 - 4 + 21 \div 6 = 29$$

**Option 1:**

6 and 5

**Option 2:**

6 and 7

**Option 3:**

21 and 29

**Option 4:**

5 and 4

**Correct Answer:**

6 and 7

**Solution:**

**Given:**

$$5 \times 7 - 4 + 21 \div 6 = 29$$

Replace the given numbers in the options with the original numbers in the given equation.

**First option:** 6 and 5

Solving the L.H.S. of the equation –

$$= 6 \times 7 - 4 + 21 \div 5$$

$$= 6 \times 7 - 4 + 4.2$$

$$= 42 - 4 + 4.2$$

$$= 42.2 \neq 29$$

**Second option:** 6 and 7

Solving the L.H.S. of the equation –

$$= 5 \times 6 - 4 + 21 \div 7$$

$$= 5 \times 6 - 4 + 3$$

$$= 30 - 4 + 3$$

$$= 29 = \text{R.H.S.}$$

**Third option:** 21 and 29

$$5 \times 7 - 4 + 29 \div 6 = 21$$

Solving the L.H.S. of the equation –

$$= 5 \times 7 - 4 + 29 \div 6$$

$$= 5 \times 7 - 4 + 4.83$$

$$= 35 - 4 + 4.83$$

$$= 35.83 \neq 21$$

L.H.S  $\neq$  R.H.S

**Fourth option:** 5 and 4

Solving the L.H.S. of the equation –

$$= 4 \times 7 - 5 + 21 \div 6$$

$$= 4 \times 7 - 5 + 3.5$$

$$= 28 - 5 + 3.5$$

$$= 26.5 \neq 29$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.**  
**141**

**Directions:** By Interchanging the given two numbers which of the following equations will be not correct?

8 and 2

I.  $8 \times 4 - 6 \div 3 + 2 = 14$

II.  $6 - 8 \times 3 + 2 \div 1 = 9$

**Option 1:**

Only I

**Option 2:**

Neither I nor II

**Option 3:**

Only II

**Option 4:**

Both I and II

**Correct Answer:**

Only II

**Solution:**

**Given:**

8 and 2 are interchanged –

I.  $8 \times 4 - 6 \div 3 + 2 = 14$

II.  $6 - 8 \times 3 + 2 \div 1 = 9$

For equation I –

After interchanging the given numbers, we get –

$$\Rightarrow 2 \times 4 - 6 \div 3 + 8$$

$$\Rightarrow 2 \times 4 - 2 + 8$$

$$\Rightarrow 8 - 2 + 8$$

$$\Rightarrow 14$$

For equation II –

After interchanging the given numbers, we get –

$$\Rightarrow 6 - 2 \times 3 + 8 \div 1$$

$$\Rightarrow 6 - 2 \times 3 + 8$$

$$\Rightarrow 6 - 6 + 8$$

$$\Rightarrow 8 \neq 9$$

So, only equation II doesn't give the required answer. Hence, the **third option** is correct.

**Q.  
142**

**Directions:** By Interchanging the given two numbers 9 and 3

I.  $7 \times 4 \div 2 - 9 + 3 = 22$

II.  $9 + 4 - 6 \times 3 \div 2 = -10$

**Option 1:**

Only I

**Option 2:**

Both I and II

**Option 3:**

Only II

**Option 4:**

Neither I nor II

**Correct Answer:**

Both I and II

**Solution:**

**Given:**

I.  $7 \times 4 \div 2 - 9 + 3 = 22$

II.  $9 + 4 - 6 \times 3 \div 2 = -10$

After Interchanging 9 and 3.

$$I. 7 \times 4 \div 2 - 3 + 9 = 22$$

Solving the L.H.S. of the equation -

$$7 \times 2 - 9 + 3$$

$$14 - 9 + 3$$

$$8 \neq 22$$

$$II. 3 + 4 - 6 \times 9 \div 2 = -10$$

Solving the L.H.S. of the equation -

$$3 + 4 - 27$$

$$-20 \neq 10$$

So, both the equations are incorrect. Hence, the **second option** is correct.

**Q.**  
**143**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$4 \div 32 + 8 \times 9 - 5 = 35$$

**Option 1:**

$\times$  and  $-$

**Option 2:**

$\div$  and  $+$

**Option 3:**

$\div$  and  $\times$

**Option 4:**

× and +

**Correct Answer:**

÷ and +

**Solution:**

**Given:**

$$4 \div 32 + 8 \times 9 - 5 = 35$$

After interchanging signs according to the given options.

**First option:** × and –

Solving the L.H.S. of the equation –

$$4 \div 32 + 8 - 9 \times 5 = 35$$

$$0.125 + 8 - 45$$

$$-36.875 \neq 35$$

**Second option:** ÷ and +

Solving the L.H.S. of the equation –

$$4 + 32 \div 8 \times 9 - 5 = 35$$

$$4 + 4 \times 9 - 5$$

$$40 - 5$$

$$35 = 35 \text{ (L.H.S. = R.H.S.)}$$

**Third option:** ÷ and ×

Solving the L.H.S. of the equation

$$4 \times 32 + 8 \div 9 - 5 = 35$$

$$4 \times 32 + 0.88 - 5$$

$$123.88 \neq 35$$

**Fourth option:** × and +

Solving the L.H.S. of the equation –

$$4 \div 32 \times 8 + 9 - 5 = 35$$

$$0.125 \times 8 + 9 - 5$$

$$5 \neq 35$$

So, only the second option satisfies the R.H.S. of the equation.  
Hence, the **second option** is correct.

**Q.  
144**

**Directions:** After interchanging which two signs, the value of the given equation will be 1?

$$3 \div 1 + 6 \times 2 - 5$$

**Option 1:**

+ and -

**Option 2:**

÷ and +

**Option 3:**

× and -

**Option 4:**

÷ and ×

**Correct Answer:**

÷ and ×

**Solution:**

**Given:**

$$3 \div 1 + 6 \times 2 - 5$$

Interchange the signs according to the given options.

**First option:** + and -

Solving the L.H.S. of the equation -

$$3 \div 1 - 6 \times 2 + 5$$

$$= 3 - 12 + 5$$

$$= -4 \neq 1$$

**Second option:**  $\div$  and +

Solving the L.H.S. of the equation -

$$3 + 1 \div 6 \times 2 - 5$$

$$= 3 + 0.334 - 5$$

$$= -1.666 \neq 1$$

**Third option:** x and -

Solving the L.H.S. of the equation -

$$3 \div 1 + 6 - 2 \times 5$$

$$= 3 + 6 - 10$$

$$= -1 \neq 1$$

**Fourth option:**  $\div$  and x

Solving the L.H.S. of the equation -

$$= 3 \times 1 + 6 \div 2 - 5$$

$$= 3 \times 1 + 3 - 5$$

$$= 6 - 5$$

$$\Rightarrow 1 = 1$$

So, after interchanging  $\div$  and x, the equation equals 1. Hence, the **fourth option** is correct.

**Q.  
145**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$7 \text{ C } 8 \text{ A } (6 \text{ D } 3) = ?$$

**Option 1:**

5

**Option 2:**

3

**Option 3:**

7

**Option 4:**

1

**Correct Answer:**

1

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

Interchange the alphabet by given expressions.

$$7 \text{ C } 8 \text{ A } (6 \text{ D } 3)=?$$

$$7 - 8 + (6 \div 3)$$

$$7 - 8 + 2$$

$$= 1$$

So, the equation equals to 1. Hence, the **fourth option** is correct.

**Q.**  
**146**

**Directions:** After interchanging the given two signs what will be the values of equation (I) and (II) respectively?

+ and -

I.  $18 \div 3 + 6 \times 2 - 8$

II.  $15 \times 3 - 45 \div 5 + 30$

**Option 1:**

24 and 2

**Option 2:**

3 and 25

**Option 3:**

2 and 66

**Option 4:**

2 and 24

**Correct Answer:**

2 and 24

**Solution:**

**Given:**

I.  $18 \div 3 + 6 \times 2 - 8$

II.  $15 \times 3 - 45 \div 5 + 30$

After interchanging + and - the equation becomes -

I.  $18 \div 3 - 6 \times 2 + 8$

$$= 6 - 6 \times 2 + 8$$

$$= 6 - 12 + 8$$

$$= 2$$

II.  $15 \times 3 + 45 \div 5 - 30$

$$= 15 \times 3 + 9 - 30$$

$$= 45 + 9 - 30$$

$$= 24$$

So, the equations are equal to 2 and 24. Hence, the **fourth option** is correct.

**Q.  
147**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$12 \div 72 \times 3 - 13 = 5$$

**Option 1:**

13 and 5

**Option 2:**

13 and 3

**Option 3:**

12 and 3

**Option 4:**

12 and 72

**Correct Answer:**

12 and 72

**Solution:**

**Given:**

$$12 \div 72 \times 3 - 13 = 5$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 13 and 5

$$= 12 \div 72 \times 3 - 5 = 13$$

Solving the L.H.S. of the equation –

$$= 0.166 \times 3 - 5$$

$$= 0.5 - 5$$

$$= -4.5 \neq 13$$

**Second option:** 13 and 3

$$= 12 \div 72 \times 13 - 3 = 5$$

Solving the L.H.S. of the equation –

$$= 0.166 \times 13 - 3$$

$$= 2.167 - 3$$

$$= -0.84 \neq 5$$

**Third option:** 12 and 3

$$= 3 \div 72 \times 12 - 13 = 5$$

Solving the L.H.S. of the equation -

$$= 0.0416 \times 12 - 13$$

$$= 0.5 - 13$$

$$= -12.5 \neq 5$$

**Fourth option:** 12 and 72

$$= 72 \div 12 \times 3 - 13 = 5$$

Solving the L.H.S. of the equation -

$$= 6 \times 3 - 13$$

$$= 18 - 13$$

$$= 5 = \text{R.H.S.}$$

So, only the fourth option satisfies the R.H.S. of the given equation.

Hence, the **fourth option** is correct.

**Q.  
148**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division then what will be the value of the following equation?

$$15 \text{ C } 9 \text{ A } 7 \text{ B } 2 = ?$$

**Option 1:**

20

**Option 2:**

15

**Option 3:**

45

**Option 4:**

36

**Correct Answer:**

20

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$15 \text{ C } 9 \text{ A } 7 \text{ B } 2 = ?$$

After replacing the letters with symbols according to the question, the equation becomes –

$$\Rightarrow 15 - 9 + 7 \times 2 = ?$$

$$= 6 + 14$$

$$= 20$$

Therefore, the required answer after solving the equation is 20.

Hence, the **first option** is correct.

**Q.  
149**

**Directions:** After interchanging the given two signs, what will be the value of the given equation?

$$\times \text{ and } \div; 68 \times 17 + 34 \div 2 - 18$$

**Option 1:**

54

**Option 2:**

60

**Option 3:**

46

**Option 4:**

35

**Correct Answer:**

54

**Solution:**

**Given:**

$$68 \times 17 + 34 \div 2 - 18$$

Interchange the mathematical expressions  $\times$  and  $\div$ .

$$68 \div 17 + 34 \times 2 - 18$$

$$= 4 + 34 \times 2 - 18$$

$$= 4 + 68 - 18$$

$$= 54$$

So, the equation is equal to 54. Hence, the **first option** is correct.

**Q.**  
**150**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division then what will be the value of the following equation?

$$(46 \text{ D } 23) \text{ A } 17 \text{ C } 13 = ?$$

*Option 1:*

9

*Option 2:*

6

*Option 3:*

5

*Option 4:*

13

**Correct Answer:**

6

**Solution:**

**Given:**

A  $\Rightarrow$  addition, B  $\Rightarrow$  multiplication, C  $\Rightarrow$  subtraction, and D  $\Rightarrow$  division.

$$(46 \text{ D } 23) \text{ A } 17 \text{ C } 13 = ?$$

After replacing the letters with symbols the equation becomes –

$$\Rightarrow (46 \div 23) + 17 - 13 = ?$$

$$= 2 + 4$$

$$= 6$$

Therefore, after solving the equation the answer is 6. Hence, the **second option** is correct.

**Q.  
151**

**Directions:** After interchanging the given two numbers, what will be the value of the given equation?

2 and 3;

$$5 - 3 \div 1 \times 2 + 7$$

*Option 1:*

8

*Option 2:*

6

*Option 3:*

9

*Option 4:*

11

**Correct Answer:**

6

**Solution:**

**Given:**

2 and 3

$$5 - 3 \div 1 \times 2 + 7$$

After interchanging the numbers according to the question the equation becomes –

$$\Rightarrow 5 - 2 \div 1 \times 3 + 7$$

$$= 5 - 6 + 7$$

$$= 6$$

So, the required answer after solving the equation is 6. Hence, the **second option** is correct.

**Q.  
152**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$15 - 24 + 63 \div 7 \times 2 = 9$$

**Option 1:**

63 and 9

**Option 2:**

7 and 63

**Option 3:**

24 and 9

**Option 4:**

63 and 24

**Correct Answer:**

24 and 9

**Solution:**

**Given:**

$$15 - 24 + 63 \div 7 \times 2 = 9$$

According to the given options interchange the numbers.

**First option:** 63 and 9

$$15 - 24 + 63 \div 7 \times 2 = 9$$

Solving the L.H.S. of the equation -

$$15 - 24 + 9 \times 2$$

$$15 - 24 + 18$$

$$6 \neq 9$$

**Second option:** 7 and 63

$$15 - 24 + 7 \div 63 \times 2 = 9$$

Solving the L.H.S. of the equation -

$$15 - 24 + 0.222$$

$$-8.778 \neq 9$$

**Third option:** 24 and 9

$$15 - 9 + 63 \div 7 \times 2 = 24$$

Solving the L.H.S. of the equation -

$$15 - 9 + 9 \times 2 = 24$$

$$15 - 9 + 18 = 24$$

$$24 = 24 \text{ (L.H.S. = R.H.S)}$$

**Fourth option:** 63 and 24

Solving the L.H.S. of the equation –

$$15 - 63 + 24 \div 7 \times 2 = 9$$

$$15 - 63 + 6.85$$

$$-41.14 \neq 9$$

So, 24 and 9 are interchanged numbers to make the equation correct. Hence, the **third option** is correct.

**Q.  
153**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$5 \times 6 - 7 + 24 \div 12 = 35$$

**Option 1:**

+ and =

**Option 2:**

+ and –

**Option 3:**

= and –

**Option 4:**

× and –

**Correct Answer:**

+ and –

**Solution:**

**Given:**

$$5 \times 6 - 7 + 24 \div 12 = 35$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** + and =

$$5 \times 6 - 7 = 24 \div 12 + 35$$

$$\Rightarrow 30 - 7 = 2 + 35$$

$$\Rightarrow 23 \neq 37$$

**Second option:** + and -

$$5 \times 6 + 7 - 24 \div 12 = 35$$

$$= 5 \times 6 + 7 - 2$$

$$= 30 + 7 - 2$$

$$\Rightarrow 35 = 35$$

**Third option:** = and -

$$5 \times 6 = 7 + 24 \div 12 - 35$$

$$\Rightarrow 30 = 7 + 2 - 35$$

$$\Rightarrow 30 \neq -26$$

**Fourth option:** x and -

$$5 - 6 \times 7 + 24 \div 12 = 35$$

$$\Rightarrow 5 - 6 \times 7 + 2$$

$$\Rightarrow 5 - 42 + 2$$

$$\Rightarrow -35 \neq 35$$

So, only the second option satisfies the R.H.S. of the equation. Hence, the **second option** is correct.

**Q.  
154**

**Directions:** Which two numbers should be interchanged, to make the given equation correct?  
 $192 \div 12 \times 6 + 16 - 18 = 66$

**Option 1:**  
16 and 18

**Option 2:**  
16 and 6

**Option 3:**  
6 and 18

**Option 4:**  
16 and 12

**Correct Answer:**  
16 and 12

**Solution:**

**Given:**

$$192 \div 12 \times 6 + 16 - 18 = 66$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 16 and 18

$$192 \div 12 \times 6 + 16 - 18 = 66$$

$$= 192 \div 12 \times 6 + 18 - 16 = 66$$

$$= 16 \times 6 + 18 - 16$$

$$= 98 \neq 66$$

**Second option:** 16 and 6

$$192 \div 12 \times 6 + 16 - 18 = 66$$

$$= 192 \div 12 \times 16 + 6 - 18 = 66$$

$$= 16 \times 16 + 6 - 18$$

$$= 256 + 6 - 18$$

$$= 244 \neq 66$$

**Third option:** 6 and 18

$$192 \div 12 \times 6 + 16 - 18 = 66$$

$$= 192 \div 12 \times 18 + 16 - 6 = 66$$

$$= 16 \times 18 + 16 - 6$$

$$= 288 + 16 - 6$$

$$= 298 \neq 66$$

**Fourth Option:** 16 and 12

$$192 \div 12 \times 6 + 16 - 18 = 66$$

$$= 192 \div 16 \times 6 + 12 - 18 = 66$$

$$= 12 \times 6 + 12 - 18$$

$$= 72 + 12 - 18$$

$$= 66$$

Here, only the fourth option satisfies the R.H.S. of the given equation. Hence, the **fourth option** is correct.

**Q.  
155**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$7 \text{ B } 5 \text{ A } 31 \text{ C } (48 \text{ D } 6) = ?$$

**Option 1:**

62

**Option 2:**

38

**Option 3:**

58

**Option 4:**

46

**Correct Answer:**

58

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$7 \text{ B } 5 \text{ A } 31 \text{ C } (48 \text{ D } 6) = ?$$

After replacing letters with equivalent symbols, the equation becomes –

$$\begin{aligned} &\Rightarrow 7 \times 5 + 31 - (48 \div 6) = ? \\ &= 35 + 31 - 8 \\ &= 58 \end{aligned}$$

So, after solving the equation the answer is 58. Hence, the **third option** is correct.

**Q.**  
**156**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$72 \div 4 \times 64 + 8 - 24 = 80$$

**Option 1:**

$\div$  and  $\times$

**Option 2:**

$-$  and  $+$

**Option 3:**

$\div$  and  $+$

**Option 4:**

$-$  and  $\times$

**Correct Answer:**

÷ and +

**Solution:**

**Given:**

$$72 \div 4 \times 64 + 8 - 24 = 80$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** ÷ and ×

$$= 72 \times 4 \div 64 + 8 - 24$$

$$= 72 \times 0.0625 + 8 - 24$$

$$= 4.5 + 8 - 24$$

$$= -11.5 \neq 80$$

**Second option:** - and +

$$= 72 \div 4 \times 64 - 8 + 24$$

$$= 18 \times 64 - 8 + 24$$

$$= 1152 - 8 + 24$$

$$= 1168 \neq 80$$

**Third option:** ÷ and +

$$= 72 + 4 \times 64 \div 8 - 24$$

$$= 72 + 4 \times 8 - 24$$

$$= 72 + 32 - 24$$

$$= 80 = \text{R.H.S.}$$

**Fourth option:** - and ×

$$= 72 \div 4 - 64 + 8 \times 24$$

$$= 18 - 64 + 8 \times 24$$

$$= 18 - 64 + 192$$

$$= 146 \neq 80$$

So, only the third option satisfies the R.H.S. of the given equation.  
Hence, the **third option** is correct.

**Q.  
157**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$68 \div 2 - 42 + 108 \times 12 = 103$$

**Option 1:**

= and -

**Option 2:**

+ and -

**Option 3:**

÷ and ×

**Option 4:**

÷ and +

**Correct Answer:**

÷ and ×

**Solution:**

**Given:**

$$68 \div 2 - 42 + 108 \times 12 = 103$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** = and -

$$68 \div 2 = 42 + 108 \times 12 - 103$$

$$\text{L.H.S.} \rightarrow 68 \div 2 = 34$$

$$\text{R.H.S.} \rightarrow 42 + 108 \times 12 - 103$$

$$= 42 + 1296 - 103$$

$$= 1235 \neq 34$$

$$\text{L.H.S.} \neq \text{R.H.S.}$$

**Second option:** + and -

$$\text{L.H.S.} \rightarrow 68 \div 2 + 42 - 108 \times 12$$

$$= 34 + 42 - 108 \times 12$$

$$= 34 + 42 - 1296$$

$$= -1220 \neq 103$$

**Third option:**  $\div$  and  $\times$

$$\text{L.H.S.} \rightarrow 68 \times 2 - 42 + 108 \div 12$$

$$= 68 \times 2 - 42 + 9$$

$$= 136 - 42 + 9$$

$$= 103 = \text{R.H.S.}$$

**Fourth option:**  $\div$  and +

$$\text{L.H.S.} \rightarrow 68 + 2 - 42 \div 108 \times 12$$

$$= 68 + 2 - 0.38 \times 12$$

$$= 68 + 2 - 4.66$$

$$= 65.34 \neq 103$$

So, only the third option satisfies the R.H.S. of the given equation.  
Hence, the **third option** is correct.

**Q.  
158**

**Directions:** Which two signs should be interchanged, to make the given equation correct?

$$2 \div 9 \times 18 + 7 - 4 = 1$$

**Option 1:**

= and ×

**Option 2:**

= and -

**Option 3:**

- and +

**Option 4:**

× and +

**Correct Answer:**

- and +

**Solution:**

**Given:**

$$2 \div 9 \times 18 + 7 - 4 = 1$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** = and ×

$$2 \div 9 \times 18 + 7 - 4 = 1$$

On interchanging the mathematical signs, we get –

$$2 \div 9 = 18 + 7 - 4 \times 1$$

$$\text{L.H.S.} = 2 \div 9 = 0.22$$

$$\text{R.H.S.} = 18 + 7 - 4 \times 1$$

$$= 18 + 7 - 4$$

$$= 18 + 7 - 4$$

$$= 0.22 \neq 21$$

**Second option:** = and –

$$2 \div 9 \times 18 + 7 - 4 = 1$$

On interchanging the mathematical signs, we get –

$$2 \div 9 \times 18 + 7 = 4 - 1$$

$$\text{L.H.S.} = 2 \div 9 \times 18 + 7$$

$$= 4 + 7 = 11$$

$$\text{R.H.S.} = 4 - 1 = 3$$

$$= 11 \neq 3$$

**Third option:** – and +

$$2 \div 9 \times 18 + 7 - 4 = 1$$

On interchanging the mathematical signs, we get –

$$2 \div 9 \times 18 - 7 + 4 = 1$$

$$\text{L.H.S.} = 2 \div 9 \times 18 - 7 + 4$$

$$= 4 - 7 + 4$$

$$= 1$$

**Fourth option:**  $\times$  and +

$$2 \div 9 \times 18 + 7 - 4 = 1$$

On interchanging the mathematical signs, we get –

$$2 \div 9 + 18 \times 7 - 4 = 1$$

$$\text{L.H.S.} = 2 \div 9 + 18 \times 7 - 4$$

$$= 0.22 + 18 \times 7 - 4$$

$$\begin{aligned} &= 0.22 + 126 - 4 \\ &= 122.22 \\ &= 122.22 \neq 1 \end{aligned}$$

Here, only the third option satisfies the R.H.S. of the given equation. Hence, the **third option** is correct.

**Q.**  
**159**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$4 + 40 \times 5 - 16 \div 8 = 79$$

**Option 1:**  
16 and 4

**Option 2:**  
4 and 40

**Option 3:**  
5 and 16

**Option 4:**  
40 and 16

**Correct Answer:**  
40 and 16

**Solution:**

**Given:**

$$4 + 40 \times 5 - 16 \div 8 = 79$$

Let's check the options -

**First option:** 16 and 4

On interchanging the numbers, we get -

$$16 + 40 \times 5 - 4 \div 8 = 79$$

Solving the L.H.S. of the given equation -

$$= 16 + 40 \times 5 - 4 \div 8$$

$$= 16 + 40 \times 5 - 0.5$$

$$= 16 + 200 - 0.5$$

$$= 215.5 \neq 79$$

**Second option:** 4 and 40

On interchanging the numbers, we get -

$$40 + 4 \times 5 - 16 \div 8 = 79$$

Solving the L.H.S. of the given equation -

$$= 40 + 4 \times 5 - 16 \div 8$$

$$= 40 + 4 \times 5 - 2$$

$$= 40 + 20 - 2$$

$$= 58 \neq 79$$

**Third option:** 5 and 16

On interchanging the numbers, we get -

$$4 + 40 \times 16 - 5 \div 8 = 79$$

Solving the L.H.S. of the given equation -

$$= 4 + 40 \times 16 - 5 \div 8$$

$$= 4 + 40 \times 16 - 0.625$$

$$= 4 + 640 - 0.625$$

$$= 643.375 \neq 79$$

**Fourth option:** 40 and 16

On interchanging the numbers, we get –

$$4 + 16 \times 5 - 40 \div 8 = 79$$

Solving the L.H.S. of the given equation –

$$= 4 + 16 \times 5 - 40 \div 8$$

$$= 4 + 16 \times 5 - 5$$

$$= 4 + 80 - 5$$

$$= 79 = \text{R.H.S.}$$

So, only the fourth option satisfies the R.H.S. of the equation. Hence, the **fourth option** is correct.

**Q.**  
**160**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$11 \text{ C } 5 \text{ A } (9 \text{ D } 3) \text{ B } 2 = ?$$

**Option 1:**

12

**Option 2:**

10

**Option 3:**

7

**Option 4:**

9

**Correct Answer:**

12

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division

$$11 \text{ C } 5 \text{ A } (9 \text{ D } 3) \text{ B } 2 = ?$$

After replacing the letters with the mathematical signs, we get –

$$= 11 - 5 + (9 \div 3) \times 2$$

$$= 11 - 5 + 3 \times 2$$

$$= 11 - 5 + 6$$

$$= 12$$

So, 12 is the answer to the given equation. Hence, the **first option** is correct.

**Q.**  
**161**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$5 \div 4 \times 8 = 7 - 3$$

**Option 1:**

$\div$  and  $-$

**Option 2:**

= and -

**Option 3:**

× and -

**Option 4:**

÷ and =

**Correct Answer:**

= and -

**Solution:**

**Given:**

$$5 \div 4 \times 8 = 7 - 3$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** ÷ and -

$$5 \div 4 \times 8 = 7 - 3$$

$$\Rightarrow 5 - 4 \times 8 = 7 \div 3$$

$$\Rightarrow 5 - 32 = 2.33$$

$$\Rightarrow -27 \neq 2.33$$

**Second option:** = and -

$$5 \div 4 \times 8 = 7 - 3$$

$$\Rightarrow 5 \div 4 \times 8 - 7$$

$$\Rightarrow 1.25 \times 8 - 7$$

$$\Rightarrow 10 - 7$$

$$\Rightarrow 3$$

**Third option:** × and -

$$5 \div 4 \times 8 = 7 - 3$$

$$\Rightarrow 5 \div 4 - 8 = 7 \times 3$$

$$\Rightarrow 1.25 - 8 = 21$$

$$\Rightarrow -6.75 \neq 21$$

**Fourth option:**  $\div$  and  $=$

$$5 \div 4 \times 8 = 7 - 3$$

$$\Rightarrow 5 = 4 \times 8 \div 7 - 3$$

$$\Rightarrow 5 = 4 \times 1.14 - 3$$

$$\Rightarrow 5 \neq 1.56$$

Here, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct.

**Q.  
162**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$8 \times 3 - 12 \div 6 + 18 = 33$$

**Option 1:**

18 and 33

**Option 2:**

12 and 33

**Option 3:**

8 and 3

**Option 4:**

12 and 18

**Correct Answer:**

12 and 18

**Solution:**

**Given:**

$$8 \times 3 - 12 \div 6 + 18 = 33$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** 18 and 33

$$\Rightarrow 8 \times 3 - 12 \div 6 + 33 = 18$$

Solving the L.H.S. of the equation -

$$= 8 \times 3 - 2 + 33$$

$$= 24 - 2 + 33$$

$$= 55 \neq 18$$

**Second option:** 12 and 33

$$\Rightarrow 8 \times 3 - 33 \div 6 + 18 = 12$$

Solving the L.H.S. of the equation -

$$= 8 \times 3 - 5.5 + 18$$

$$= 24 - 5.5 + 18$$

$$= 36.5 \neq 12$$

**Third option:** 8 and 3

$$\Rightarrow 3 \times 8 - 12 \div 6 + 18 = 33$$

Solving the L.H.S. of the equation -

$$= 3 \times 8 - 2 + 18$$

$$= 24 - 2 + 18$$

$$= 40 \neq 33$$

**Fourth option:** 12 and 18

$$\Rightarrow 8 \times 3 - 18 \div 6 + 12 = 33$$

Solving the L.H.S. of the equation –

$$= 8 \times 3 - 3 + 12$$

$$= 24 - 3 + 12$$

$$= 33 = \text{R.H.S.}$$

So, only the fourth option satisfies the R.H.S. of the given equation.

Hence, the **fourth option** is correct.

**Q.**  
**163**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division then what will be the value of the following equation?

$$(16 \text{ D } 4) \text{ A } 7 \text{ C } 5 = ?$$

**Option 1:**

5

**Option 2:**

3

**Option 3:**

8

**Option 4:**

6

**Correct Answer:**

6

**Solution:**

**Given:**

A  $\Rightarrow$  addition, B  $\Rightarrow$  multiplication, C  $\Rightarrow$  subtraction, and D  $\Rightarrow$  division.  
 (16 D 4) A 7 C 5 = ?

After replacing the letters with symbols the equation is as follows –

$$\Rightarrow (16 \div 4) + 7 - 5 = ?$$

$$= 4 + 7 - 5$$

$$= 6$$

So, 6 is the required answer after solving the equation. Hence, the **fourth option** is correct.

**Q.  
164**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$6 = 9 \div 3 - 2 + 7$$

**Option 1:**

= and –

**Option 2:**

+ and ÷

**Option 3:**

- and +

**Option 4:**

+ and =

**Correct Answer:**

+ and =

**Solution:**

**Given:**

$$6 = 9 \div 3 - 2 + 7$$

Interchange the signs according to options.

**First option:** = and -

$$6 - 9 \div 3 = 2 + 7$$

$$6 - 3 = 9$$

$$3 \neq 9$$

**Second option:** + and ÷

$$6 = 9 + 3 - 2 \div 7$$

$$= 9 + 3 - 0.285$$

$$6 \neq 11.715$$

**Third option:** - and +

$$6 = 9 \div 3 + 2 - 7$$

$$= 3 + 2 - 7$$

$$6 \neq -2$$

**Fourth option:** + and =

$$6 + 9 \div 3 - 2 = 7$$

$$6 + 3 - 2 = 7$$

$$7 = 7.$$

So, only the fourth option satisfies the given equation. Hence, the **fourth option** is correct.

**Q.  
165**

**Directions:** After interchanging two signs and two numbers, the value of the given equation will be 6.

$$7 - 2 \times 1 \div 3 + 5$$

**Option 1:**

× and ÷, 7 and 5

**Option 2:**

× and ÷, 2 and 7

**Option 3:**

+ and -, 7 and 5

**Option 4:**

× and -, 5 and 3

**Correct Answer:**

× and ÷, 7 and 5

**Solution:****Given:**

$$7 - 2 \times 1 \div 3 + 5 = 6$$

Replace the given symbols and numbers according to the options one by one with the original symbols and numbers in the given equation.

**First option:**  $\times$  and  $\div$ , 7 and 5

Solving the L.H.S. of the equation -

$$= 5 - 2 \div 1 \times 3 + 7$$

$$= 5 - 6 + 7$$

$$= 6 = \text{R.H.S.}$$

**Second option:**  $\times$  and  $\div$ , 2 and 7

Solving the L.H.S. of the equation -

$$= 2 - 7 \div 1 \times 3 + 5$$

$$= 2 - 21 + 5$$

$$= -14 \neq 6$$

**Third option:** + and -, 7 and 5

Solving the L.H.S. of the equation -

$$= 5 + 2 \times 1 \div 3 - 7$$

$$= 5 + 2 \times 0.33 - 7$$

$$= 5 + 0.66 - 7$$

$$= -1.34 \neq 6$$

**Fourth option:**  $\times$  and -, 5 and 3

Solving the L.H.S. of the equation -

$$= 7 \times 2 - 1 \div 5 + 3$$

$$= 14 - 0.2 + 3$$

$$= 16.8 \neq 6$$

So, only the first option satisfies the R.H.S. of the given equation.  
Hence, the **first option** is correct.

**Q.  
166**

**Directions:** After interchanging the given two signs and two numbers, what will be the value of the given equation?

÷ and ×, 7 and 4;

$$7 \div 6 + 4 - 3 \times 1$$

**Option 1:**

50

**Option 2:**

28

**Option 3:**

35

**Option 4:**

20

**Correct Answer:**

28

**Solution:**

**Given:**

÷ and ×, 7 and 4;

$$7 \div 6 + 4 - 3 \times 1$$

After replacing symbols and numbers according to the question, the equation becomes –

$$\Rightarrow 4 \times 6 + 7 - 3 \div 1$$

$$= 24 + 4$$

$$= 28$$

So, the required answer after solving the equation is 28. Hence, the **second option** is correct.

**Q.**  
**167**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$108 \div 6 - 18 + 8 \times 9 = 42$$

**Option 1:**

108 and 18

**Option 2:**

9 and 6

**Option 3:**

18 and 9

**Option 4:**

6 and 8

**Correct Answer:**

9 and 6

**Solution:**

**Given:**

$$108 \div 6 - 18 + 8 \times 9 = 42$$

Replace the given numbers according to the options one by one with the original symbols in the given equation.

**First option:** 108 and 18

Solving the L.H.S. of the equation –

$$\Rightarrow 18 \div 6 - 108 + 8 \times 9$$

$$= 3 - 108 + 72$$

$$= -33 \neq 42$$

**Second option:** 9 and 6

Solving the L.H.S. of the equation –

$$\Rightarrow 108 \div 9 - 18 + 8 \times 6$$

$$= 12 - 18 + 48$$

$$= 42 = 42$$

**Third option:** 18 and 9

Solving the L.H.S. of the equation –

$$\Rightarrow 108 \div 6 - 9 + 8 \times 18$$

$$= 18 - 9 + 144$$

$$= 153 \neq 42$$

**Fourth option:** 6 and 8

Solving the L.H.S. of the equation –

$$\begin{aligned} &\Rightarrow 108 \div 8 - 18 + 6 \times 9 \\ &= 13.5 - 18 + 54 \\ &= 49.5 \neq 42 \end{aligned}$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.  
168**

**Directions:** Which two numbers should be interchanged, to make the given equation correct?

$$3 \times 7 - 5 + 2 = 10$$

**Option 1:**  
10 and 7

**Option 2:**  
7 and 5

**Option 3:**  
3 and 5

**Option 4:**  
3 and 2

**Correct Answer:**  
7 and 5

**Solution:**

**Given:**

$$3 \times 7 - 5 + 2 = 10$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 10 and 7

$$3 \times 7 - 5 + 2 = 10$$

$$\Rightarrow 3 \times 10 - 5 + 2 = 7$$

$$= 30 - 3$$

$$= 27 \neq 7$$

**Second option:** 7 and 5

$$3 \times 7 - 5 + 2 = 10$$

$$\Rightarrow 3 \times 5 - 7 + 2 = 10$$

$$= 15 - 5$$

$$= 10$$

**Third option:** 3 and 5

$$3 \times 7 - 5 + 2 = 10$$

$$\Rightarrow 5 \times 7 - 3 + 2 = 10$$

$$= 35 - 1$$

$$= 34 \neq 10$$

**Fourth option:** 3 and 2

$$3 \times 7 - 5 + 2 = 10$$

$$\Rightarrow 2 \times 7 - 5 + 3 = 10$$

$$= 14 - 2$$

$$= 12 \neq 10$$

Here, only the second option satisfies the R.H.S. of the given equation. Hence, the **second option** is correct.

**Q.  
169**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$144 \div 24 \times 6 + 12 - 18 = 78$$

**Option 1:**

6 and 18

**Option 2:**

24 and 12

**Option 3:**

24 and 6

**Option 4:**

24 and 18

**Correct Answer:**

24 and 12

**Solution:**

**Given:**

$$144 \div 24 \times 6 + 12 - 18 = 78$$

Interchange the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 6 and 18

Solving the L.H.S. of the equation –

$$\begin{aligned} &\Rightarrow 144 \div 24 \times 18 + 12 - 6 \\ &= 108 + 12 - 6 \\ &= 114 \neq 78 \end{aligned}$$

**Second option:** 24 and 12

Solving the L.H.S. of the equation –

$$\begin{aligned} &\Rightarrow 144 \div 12 \times 6 + 24 - 18 \\ &= 72 + 6 \\ &= 78 = \text{R.H.S.} \end{aligned}$$

**Third option:** 24 and 6

Solving the L.H.S. of the equation –

$$\begin{aligned} &\Rightarrow 144 \div 6 \times 24 + 12 - 18 \\ &= 576 + 12 - 18 \\ &= 576 - 6 \\ &= 570 \neq 78 \end{aligned}$$

**Fourth option:** 24 and 18

Solving the L.H.S. of the equation –

$$\begin{aligned} &\Rightarrow 144 \div 18 \times 6 + 12 - 24 \\ &= 48 + 12 - 24 \\ &= 48 - 12 \\ &= 36 \neq 78 \end{aligned}$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.  
170**

**Directions:** Which of the mathematical signs should be interchanged in the below equation, to make it mathematically correct?

$$45 - 5 + 96 \div 8 \times 24 = 9$$

**Option 1:**

+ and -

**Option 2:**

× and -

**Option 3:**

÷ and -

**Option 4:**

+ and ×

**Correct Answer:**

+ and ×

**Solution:**

**Given:**

$$45 - 5 + 96 \div 8 \times 24 = 9$$

Replace the given symbols according to the options one by one with the original symbols in the given equation.

**First option:** + and -

$$\begin{aligned}
 45 - 5 + 96 \div 8 \times 24 &= 9 \\
 \Rightarrow 45 + 5 - 96 \div 8 \times 24 & \\
 = 50 - 12 \times 24 & \\
 = 50 - 288 & \\
 = -238 \neq 9 &
 \end{aligned}$$

**Second option:**  $\times$  and  $-$

$$\begin{aligned}
 45 - 5 + 96 \div 8 \times 24 &= 9 \\
 \Rightarrow 45 \times 5 + 96 \div 8 - 24 & \\
 = 225 + 12 - 24 & \\
 = 213 \neq 9 &
 \end{aligned}$$

**Third option:**  $\div$  and  $-$

$$\begin{aligned}
 45 - 5 + 96 \div 8 \times 24 &= 9 \\
 \Rightarrow 45 \div 5 + 96 - 8 \times 24 & \\
 = 9 + 96 - 192 & \\
 = -90 \neq 9 &
 \end{aligned}$$

**Fourth option:**  $+$  and  $\times$

$$\begin{aligned}
 45 - 5 + 96 \div 8 \times 24 &= 9 \\
 \Rightarrow 45 - 5 \times 96 \div 8 + 24 & \\
 = 45 - 60 + 24 & \\
 = 9 &
 \end{aligned}$$

Here, only the fourth option satisfies the R.H.S. of the given equation. Hence, the **fourth option** is correct.

**Q.**  
**171**

**Directions:** After interchanging which two numbers, the value of the given equation will be 30.

$$8 \times 1 - 9 \div 3 + 4$$

**Option 1:**

4 and 3

**Option 2:**

1 and 4

**Option 3:**

3 and 9

**Option 4:**

8 and 4

**Correct Answer:**

1 and 4

**Solution:**

**Given:**

$$8 \times 1 - 9 \div 3 + 4 = 30$$

Replace the given numbers according to the options one by one with the original numbers in the given equation.

**First option:** 4 and 3

Solving the L.H.S. of the equation –

$$= 8 \times 1 - 9 \div 4 + 3$$

$$= 8 \times 1 - 2.25 + 3$$

$$= 8 - 2.25 + 3$$

$$= 8.75 \neq 30$$

**Second option:** 1 and 4

Solving the L.H.S. of the equation –

$$= 8 \times 4 - 9 \div 3 + 1$$

$$= 8 \times 4 - 3 + 1$$

$$= 32 - 3 + 1$$

$$= 30 = \text{R.H.S.}$$

**Third option:** 3 and 9

Solving the L.H.S. of the equation -

$$= 8 \times 1 - 3 \div 9 + 4$$

$$= 8 \times 1 - 0.34 + 4$$

$$= 8 - 0.34 + 4$$

$$= 11.67 \neq 30$$

**Fourth option:** 8 and 4

Solving the L.H.S. of the equation -

$$= 4 \times 1 - 9 \div 3 + 8$$

$$= 4 \times 1 - 3 + 8$$

$$= 4 - 3 + 8$$

$$= 9 \neq 30$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.

**Q.**  
**172**

**Directions:** By interchanging the given two signs which of the following equations will be correct?

+ and ÷

I.  $4 \div 2 + 1 - 8 \times 3 = -10$

II.  $18 \div 2 - 8 + 4 \times 3 = 14$

**Option 1:**

Only II

**Option 2:**

Only I

**Option 3:**

Neither I nor II

**Option 4:**

Both I and II

**Correct Answer:**

Only II

**Solution:**

**Given:**

+ and ÷ are interchanged –

I.  $4 \div 2 + 1 - 8 \times 3 = -10$

II.  $18 \div 2 - 8 + 4 \times 3 = 14$

For equation I –

After interchanging the given symbols, we get –

$$\Rightarrow 4 + 2 \div 1 - 8 \times 3$$

$$\Rightarrow 4 + 2 - 8 \times 3$$

$$\Rightarrow 4 + 2 - 24$$

$$\Rightarrow -18 \neq -10$$

For equation II –

After interchanging the given symbols, we get –

$$\Rightarrow 18 + 2 - 8 \div 4 \times 3$$

$$\Rightarrow 18 + 2 - 2 \times 3$$

$$\Rightarrow 18 + 2 - 6$$

$$\Rightarrow 14 = 14$$

So, only equation II gives the required answer. Hence, the **first option** is correct.

**Q.  
173**

**Directions:** If A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division, then what will be the value of the following equation?

$$7 \text{ B } 3 \text{ C } 18 \text{ A } (4 \text{ D } 2) = ?$$

**Option 1:**

6

**Option 2:**

7

**Option 3:**

5

**Option 4:**

4

**Correct Answer:**

5

**Solution:**

**Given:**

A denotes addition, B denotes multiplication, C denotes subtraction, and D denotes division.

$$7 \text{ B } 3 \text{ C } 18 \text{ A } (4 \text{ D } 2) = ?$$

Replace the alphabet in the given equation with the mathematical operations.

$$\begin{aligned} &7 \times 3 - 18 + (4 \div 2) \\ &= 7 \times 3 - 18 + 2 \\ &= 21 - 18 + 2 \\ &= 5 \end{aligned}$$

So, the equation is equal to 5. Hence, the **third option** is correct.

**Q.**  
**174**

**Directions:** After interchanging the given two signs and two numbers, what will be the value of the given equation?

$$+ \text{ and } \div, 4 \text{ and } 6; 8 \div 6 \times 3 + 4 - 9$$

**Option 1:**

6

*Option 2:*

1

*Option 3:*

0

*Option 4:*

2

*Correct Answer:*

1

**Solution:**

**Given:**

+ and  $\div$ , 4 and 6 are interchanged

$$8 \div 6 \times 3 + 4 - 9 = ?$$

After interchanging the given mathematical signs and numbers, we get -

$$\Rightarrow 8 + 4 \times 3 \div 6 - 9$$

$$\Rightarrow 8 + 4 \times 0.5 - 9$$

$$\Rightarrow 8 + 2 - 9$$

$$\Rightarrow 1$$

So, 1 is the answer to the given equation. Hence, the **second option** is correct.

**Q.  
175**

**Directions:** After interchanging the given two signs, what will be the value of the given equation?

+ and -

$$12 + 8 \times 6 \div 3 - 11$$

*Option 1:*

7

*Option 2:*

5

*Option 3:*

9

*Option 4:*

8

**Correct Answer:**

7

**Solution:**

**Given:**

+ and - are interchanged -

$$12 + 8 \times 6 \div 3 - 11 = ?$$

After interchanging the given mathematical signs, we get –

$$\Rightarrow 12 - 8 \times 6 \div 3 + 11$$

$$\Rightarrow 12 - 8 \times 2 + 11$$

$$\Rightarrow 12 - 16 + 11$$

$$\Rightarrow 7$$

So, 7 is the answer to the given equation. Hence, the **first option** is correct.

**Q.**  
**176**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$96 \div 3 - 24 + 16 \times 8 = 36$$

**Option 1:**

8 and 3

**Option 2:**

24 and 3

**Option 3:**

96 and 24

**Option 4:**

8 and 16

**Correct Answer:**

8 and 3

**Solution:****Given:**

$$96 \div 3 - 24 + 16 \times 8 = 36$$

Interchange the given numbers according to the options one by one in the given equation.

**First option:** 8 and 3

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 96 \div 8 - 24 + 16 \times 3 \\ &= 12 - 24 + 48 \\ &= 36 = \text{R.H.S.} \end{aligned}$$

**Second option:** 24 and 3

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 96 \div 24 - 3 + 16 \times 8 \\ &= 4 - 3 + 128 \\ &= 129 \neq 36 \end{aligned}$$

**Third option:** 96 and 24

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 24 \div 3 - 96 + 16 \times 8 \\ &= 8 - 96 + 128 \\ &= 40 \neq 36 \end{aligned}$$

**Fourth option:** 8 and 16

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 96 \div 3 - 24 + 8 \times 16 \\ &= 32 - 24 + 128 \\ &= 136 \neq 36 \end{aligned}$$

So, only the first option satisfies the R.H.S. of the given equation.  
Hence, the **first option** is correct.

**Q.  
177**

**Directions:** By interchanging the given two numbers which of the following equations will be correct?  
8 and 4

**Option 1:**

$$4 + 8 \times 2 - 3 = 20$$

**Option 2:**

$$4 \div 2 + 8 \times 3 = 16$$

**Option 3:**

$$4 + 3 \times 8 - 2 = 21$$

**Option 4:**

$$8 - 4 + 6 = 9$$

**Correct Answer:**

$$4 \div 2 + 8 \times 3 = 16$$

**Solution:**

**Given:**

8 and 4

Replace the given numbers in the options one by one with the original numbers in the given equations.

**First option:**  $4 + 8 \times 2 - 3 = 20$

Solving the L.H.S. of the equation –

$$\Rightarrow 8 + 4 \times 2 - 3$$

$$= 8 + 8 - 3$$

$$= 13 \neq 20$$

**Second option:**  $4 \div 2 + 8 \times 3 = 16$

Solving the L.H.S. of the equation –

$$\Rightarrow 4 \div 2 + 8 \times 3$$

$$= 4 + 24$$

$$= 28 = \text{R.H.S.}$$

**Third option:**  $4 + 3 \times 8 - 2 = 21$

Solving the L.H.S. of the equation –

$$\Rightarrow 4 + 3 \times 8 - 2$$

$$= 4 + 24 - 2$$

$$= 26 \neq 21$$

**Fourth option:**  $8 - 4 + 6 = 9$

Solving the L.H.S. of the equation –

$$\Rightarrow 8 - 4 + 6$$

$$= 10 \neq 9$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.

**Q.  
178**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$9 \div 3 + 7 = 4 - 6$$

**Option 1:**

- and =

**Option 2:**

÷ and -

**Option 3:**

+ and -

**Option 4:**

÷ and =

**Correct Answer:**

- and =

**Solution:**

**Given:**

$$9 \div 3 + 7 = 4 - 6$$

Replace the given symbols according to the options one by one with the original symbols in the given equation.

**First option:** - and =

$$\Rightarrow 9 \div 3 + 7 - 4 = 6$$

$$= 3 + 7 - 4$$

$$= 6 = \text{R.H.S.}$$

**Second option:** ÷ and -

$$\Rightarrow 9 - 3 + 7 = 4 \div 6$$

$$= 13 \neq 0.67$$

**Third option:** + and -

$$\Rightarrow 9 \div 3 - 7 = 4 + 6$$

$$= 3 - 7 = 10$$

$$= -4 \neq 10$$

**Fourth option:**  $\div$  and  $=$

$$\Rightarrow 9 = 3 + 7 \div 4 - 6$$

$$= 9 = 3 + 1.75 - 6$$

$$= 9 \neq -1.25$$

So, only the first option satisfies the R.H.S. of the given equation.

Hence, the **first option** is correct.

**Q.**  
**179**

**Directions:** By Interchanging the given two numbers which of the following equations will be not correct?

9 and 7

I.  $7 \times 3 - 8 + 4 + 9 = 32$

II.  $7 - 9 \times 2 + 6 \div 3 = -3$

**Option 1:**

Only II

**Option 2:**

Neither I nor II

**Option 3:**

Both I and II

**Option 4:**

Only I

**Correct Answer:**

Only II

**Solution:**

**Given:**

9 and 7 are interchanged.

I.  $7 \times 3 - 8 + 4 + 9 = 32$

II.  $7 - 9 \times 2 + 6 \div 3 = -3$

Let's solve each equation -

I.  $9 \times 3 - 8 + 4 + 7 = 32$

$= 27 - 3$

$= 24 \neq 32$

II.  $9 - 7 \times 2 + 6 \div 3 = -3$

$= 9 - 7 \times 2 + 2$

$= 9 - 14 + 2$

$= -3 = \text{R.H.S.}$

So, only the second equation is correct. Hence, the **first option** is correct.

**Q.  
180**

**Directions:** By interchanging the two signs which of the following equations will not be correct?

+ and ×

I.  $15 + 5 \div 1 - 9 \times 4 = 70$

II.  $18 \times 17 + 3 - 6 \div 2 = 133$

**Option 1:**

Neither I nor II

**Option 2:**

Only II

**Option 3:**

Both I and II

**Option 4:**

Only I

**Correct Answer:**

Only II

**Solution:**

**Given:**

+ and × are interchanged.

I.  $15 + 5 \div 1 - 9 \times 4 = 70$

II.  $18 \times 17 + 3 - 6 \div 2 = 133$

After interchanging the symbols the equation becomes –

$$\text{I. } 15 \times 5 \div 1 - 9 + 4 = 70$$

$$= 75 - 5$$

$$= 70 = \text{R.H.S.}$$

$$\text{II. } 18 + 17 \times 3 - 6 \div 2 = 133$$

$$= 18 + 17 \times 3 - 3$$

$$= 18 + 51 - 3$$

$$= 66 \neq 133$$

So, the equation II is not correct. Hence, the **second option** is correct.

**Q.**  
**181**

**Directions:** Which of the mathematical signs should be interchanged in the below equation to make it mathematically correct?

$$14 + 63 \div 7 - 21 \times 35 = 140$$

**Option 1:**

+ and –

**Option 2:**

+ and ×

**Option 3:**

– and ×

**Option 4:**

÷ and ×

**Correct Answer:**

+ and ×

**Solution:**

**Given:**

$$14 + 63 \div 7 - 21 \times 35 = 140$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** + and -

Solving the L.H.S. of the equation -

$$= 14 - 63 \div 7 + 21 \times 35$$

$$= 14 - 9 + 21 \times 35$$

$$= 14 - 9 + 735$$

$$= 740 \neq 140$$

**Second option:** + and ×

Solving the L.H.S. of the equation -

$$= 14 \times 63 \div 7 - 21 + 35$$

$$= 14 \times 9 - 21 + 35$$

$$= 126 + 14$$

$$= 140 = \text{R.H.S.}$$

**Third option:** - and ×

Solving the L.H.S. of the equation -

$$= 14 + 63 \div 7 \times 21 - 35$$

$$= 14 + 9 \times 21 - 35$$

$$= 14 + 189 - 35$$

$$= 168 \neq 140$$

**Fourth option:**  $\div$  and  $\times$

Solving the L.H.S. of the equation –

$$= 14 + 63 \times 7 - 21 \div 35$$

$$= 14 + 63 \times 7 - 0.6$$

$$= 14 + 441 - 0.6$$

$$= 454.4 \neq 140$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.

**Q.  
182**

**Directions:** After interchanging which two signs, the value of the given equation will be 11?

$$32 + 3 - 12 \div 18 \times 9$$

**Option 1:**

$\div$  and  $-$

**Option 2:**

$\div$  and  $\times$

**Option 3:**

$+$  and  $-$

**Option 4:**

$\times$  and  $-$

**Correct Answer:**

÷ and –

**Solution:**

**Given:**

$$32 + 3 - 12 \div 18 \times 9 = 11$$

Replace the given symbols according to the options one by one with the original symbols in the given equation.

**First option:** ÷ and –

Solving the L.H.S. of the equation –

$$= 32 + 3 \div 12 - 18 \times 9$$

$$= 32 + 0.25 - 162$$

$$= -129.75 \neq 11$$

**Second option:** ÷ and ×

Solving the L.H.S. of the equation –

$$= 32 + 3 - 12 \times 18 \div 9$$

$$= 35 - 24$$

$$= 11 = \text{R.H.S.}$$

**Third option:** + and –

Solving the L.H.S. of the equation –

$$= 32 - 3 + 12 \div 18 \times 9$$

$$= 29 + 6$$

$$= 35 \neq 11$$

**Fourth option:** × and –

Solving the L.H.S. of the equation –

$$= 32 + 3 \times 12 \div 18 - 9$$

$$= 32 + 2 - 9$$

$$= 25 \neq 11$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.  
183**

**Directions:** Which two signs should be interchanged to make the given equation correct?

$$8 = 5 - 31 + 12 \div 2 \times 15$$

**Option 1:**

+ and  $\div$

**Option 2:**

$\times$  and =

**Option 3:**

$\div$  and -

**Option 4:**

- and +

**Correct Answer:**

$\times$  and =

**Solution:**

**Given:**

$$8 = 5 - 31 + 12 \div 2 \times 15$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** + and  $\div$

$$\Rightarrow 8 = 5 - 31 \div 12 + 2 \times 15$$

Solving the R.H.S. of the equation -

$$= 5 - 2.58 + 30$$

$$= 32.42 \neq 8$$

**Second option:**  $\times$  and =

$$\Rightarrow 8 \times 5 - 31 + 12 \div 2 = 15$$

Solving the L.H.S. of the equation -

$$= 8 \times 5 - 31 + 6$$

$$= 40 - 31 + 6$$

$$= 15 = \text{R.H.S.}$$

**Third option:**  $\div$  and -

$$\Rightarrow 8 = 5 \div 31 + 12 - 2 \times 15$$

Solving the R.H.S. of the equation -

$$= 0.16 + 12 - 30$$

$$= -17.84 \neq 8$$

**Fourth option:** - and +

$$\Rightarrow 8 = 5 + 31 - 12 \div 2 \times 15$$

Solving the R.H.S. of the equation -

$$= 5 + 31 - 6 \times 15$$

$$= 5 + 31 - 90$$

$$= 36 - 90$$

$$= -54 \neq 8$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.

**Q.**  
**184**

**Directions:** Which two numbers should be interchanged to make the given equation correct?

$$1 \times 4 + 3 - 5 = 6$$

**Option 1:**

4 and 5

**Option 2:**

3 and 6

**Option 3:**

5 and 3

**Option 4:**

1 and 5

**Correct Answer:**

5 and 3

**Solution:**

**Given:**

$$1 \times 4 + 3 - 5 = 6$$

Replace the given numbers in the options one by one with the original numbers in the given equation.

**First option:** 4 and 5

$$\Rightarrow 1 \times 5 + 3 - 4 = 6$$

$$= 5 - 1$$

$$= 4 \neq 6$$

**Second option:** 3 and 6

$$\Rightarrow 1 \times 4 + 6 - 5 = 3$$

$$= 4 + 1$$

$$= 5 \neq 6$$

**Third option:** 5 and 3

$$\Rightarrow 1 \times 4 + 5 - 3 = 6$$

$$= 4 + 2$$

$$= 6 = \text{R.H.S.}$$

**Fourth option:** 1 and 5

$$\Rightarrow 5 \times 4 + 3 - 1 = 6$$

$$= 20 + 2$$

$$= 22 \neq 6$$

So, only the third option satisfies the R.H.S. of the given equation.  
Hence, the **third option** is correct.

**Q.  
185**

**Directions:** If + means -, - means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means +, then what will come in place of (?) in the given equation?

$$7 \div 20 - 5 \times 20 + 2 = ?$$

**Option 1:**

10

**Option 2:**

15

**Option 3:**

20

**Option 4:**

30

**Correct Answer:**

10

**Solution:**

**Given:**

+ means -, - means ×, × means ÷, and ÷ means +.

$$7 \div 20 - 5 \times 20 + 2 = ?$$

After interchanging the given mathematical signs, we get -

$$\Rightarrow 7 + 20 \times 5 \div 20 - 2$$

$$\Rightarrow 7 + 20 \times 0.25 - 2$$

$$\Rightarrow 7 + 5 - 2$$

$$\Rightarrow 10$$

So, 10 is the answer to the given equation. Hence, the **first option** is correct.

**Q.  
186**

**Directions:** Which of the following interchange of signs would make the given equation correct?

$$42 \div 7 - 64 + 11 \times 6 = 4$$

**Option 1:**

$\div$  and  $-$

**Option 2:**

$\times$  and  $+$

**Option 3:**

$\times$  and  $-$

**Option 4:**

$+$  and  $-$

**Correct Answer:**

$+$  and  $-$

**Solution:**

**Given:**

$$42 \div 7 - 64 + 11 \times 6 = 4$$

Let's check each option -

**First option:**  $\div$  and  $-$

$$42 - 7 \div 64 + 11 \times 6 = 4$$

$$42 - 0.10 + 66$$

$$107.7 \neq 4$$

**Second option:** x and +

$$42 \div 7 - 64 \times 11 + 6 = 4$$

$$6 - 704 + 6$$

$$-692 \neq 4$$

**Third option:** x and -

$$42 \div 7 \times 64 + 11 - 6 = 4$$

$$6 \times 64 + 11 - 6$$

$$389 \neq 4$$

**Fourth option:** + and -

$$42 \div 7 + 64 - 11 \times 6 = 4$$

$$6 + 64 - 66 = 4$$

$$4 = 4 \text{ (L.H.S. = R.H.S.)}$$

So, only the fourth option satisfies the R.H.S. of the equation. Hence, the **fourth option** is correct.

**Q.  
187**

**Directions:** Which two numbers from amongst the given options should be interchanged to make the given equation correct?

$$108 \div 3 - 126 \div (5 \times 3 + 12) + 4 = 11$$

**Option 1:**

11 and 12

**Option 2:**

12 and 3

**Option 3:**

12 and 4

**Option 4:**

126 and 108

**Correct Answer:**

12 and 3

**Solution:**

**Given:**

$$108 \div 3 - 126 \div (5 \times 3 + 12) + 4 = 11$$

Interchange the numbers as given in the options.

**First option:** 11 and 12

After interchanging the numbers the equation becomes –

$$\Rightarrow 108 \div 3 - 126 \div (5 \times 3 + 11) + 4 = 12$$

$$\Rightarrow 108 \div 3 - 126 \div (26) + 4$$

$$\Rightarrow 36 - 4.84 + 4$$

$$\Rightarrow 35.16 \neq 12$$

**Second option:** 12 and 3

After interchanging the numbers the equation becomes –

$$\Rightarrow 108 \div 12 - 126 \div (5 \times 12 + 3) + 4 = 11$$

$$\Rightarrow 108 \div 12 - 126 \div (63) + 4$$

$$\Rightarrow 9 - 2 + 4 = 11$$

$$\Rightarrow 11 = 11 \text{ (L.H.S. = R.H.S.)}$$

**Third option:** 12 and 4

After interchanging the numbers the equation becomes –

$$\Rightarrow 108 \div 3 - 126 \div (5 \times 3 + 4) + 12 = 11$$

$$\Rightarrow 108 \div 3 - 126 \div (19) + 12$$

$$\Rightarrow 36 - 6.63 + 12$$

$$\Rightarrow 41.37 \neq 11$$

**Fourth option:** 126 and 108

After interchanging the numbers the equation becomes –

$$\Rightarrow 126 \div 3 - 108 \div (5 \times 3 + 12) + 4 = 11$$

$$\Rightarrow 126 \div 3 - 108 \div (27) + 4$$

$$\Rightarrow 42 - 4 + 4$$

$$\Rightarrow 34 \neq 11$$

So, only the second option satisfies the R.H.S. of the equation.

Hence, the **second option** is correct.

**Q.  
188**

**Directions:** Which two numbers from amongst the given options should be interchanged to make the given equation correct?

$$(240 \div 2 + 5) \times 8 + 15 \times 8 = 100$$

**Option 1:**

2 and 8

**Option 2:**

100 and 240

**Option 3:**

5 and 8

**Option 4:**

15 and 5

**Correct Answer:**

2 and 8

**Solution:**

**Given:**

$$(240 \div 2 + 5) \times 8 + 15 \times 8 = 100$$

Interchange the numbers according to the given options.

**First option:** 2 and 8

$$(240 \div 8 + 5) \times 2 + 15 \times 2 = 100$$

Solving the L.H.S. of the equation -

$$= (30 + 5) \times 2 + 15 \times 2$$

$$= 35 \times 2 + 15 \times 2$$

$$= 70 + 30$$

$$= 100 = 100 \text{ (L.H.S. = R.H.S.)}$$

**Second option:** 100 and 240

$$(100 \div 2 + 5) \times 8 + 15 \times 8 = 240$$

Solving the L.H.S. of the equation -

$$= (50 + 5) \times 8 + 15 \times 8$$

$$= 55 \times 8 + 15 \times 8$$

$$= 440 + 120$$

$$= 560 \neq 240$$

**Third option:** 5 and 8

$$(240 \div 2 + 8) \times 5 + 15 \times 5 = 100$$

Solving the L.H.S. of the equation –

$$= (120 + 8) \times 5 + 15 \times 5$$

$$= 640 + 75$$

$$= 715 \neq 100$$

**Fourth option:** 15 and 5

$$(240 \div 2 + 15) \times 8 + 5 \times 8 = 100$$

Solving the L.H.S. of the equation –

$$= (120 + 15) \times 8 + 5 \times 8$$

$$= 135 \times 8 + 5 \times 8$$

$$= 1080 + 40$$

$$= 1120 \neq 100$$

So, the required numbers to correct the equation are 2 and 8. Hence, the **first option** is correct.

**Q.  
189**

**Directions:** If A denotes +, B denotes  $\times$ , C denotes –, and D denotes  $\div$ , then what will come in place of (?) in the following equation?

$$(9 A 9 C 55 D 5) B ? = 10 B 3 A 5$$

**Option 1:**

5

**Option 2:**

7

**Option 3:**

11

**Option 4:**

4

**Correct Answer:**

5

**Solution:**

**Given:**

A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ .

$$(9 A 9 C 55 D 5) B ? = 10 B 3 A 5$$

On replacing the alphabet with the mathematical signs, we get –

$$\text{L.H.S.} = (9 A 9 C 55 D 5) B (?)$$

$$= (9 + 9 - 55 \div 5) \times (?)$$

$$= (9 + 9 - 11) \times (?)$$

$$= (18 - 11) \times (?)$$

$$= 7 \times (?)$$

$$\text{R.H.S.} = 10 \times 3 + 5$$

$$= 30 + 5$$

$$= 35$$

Since, L.H.S. = R.H.S.

$$\Rightarrow 7 \times (?) = 35$$

$$\Rightarrow (?) = 35 \div 7$$

$$\Rightarrow (?) = 5$$

So, 5 is the required answer. Hence, the **first option** is correct.

**Q.**  
**190**

**Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of (?) in the following equation.

$$196 \text{ D } (2 \text{ A } 3 \text{ B } 4) = 4 ? 5 \text{ B } 2$$

*Option 1:*

A

*Option 2:*

B

*Option 3:*

C

*Option 4:*

D

**Correct Answer:**

A

**Solution:**

**Given:**

A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$

$$196 \text{ D } (2 \text{ A } 3 \text{ B } 4) = 4 ? 5 \text{ B } 2$$

On replacing the letters with the mathematical signs, we get –

$$\text{L.H.S} = 196 \text{ D } (2 \text{ A } 3 \text{ B } 4)$$

$$= 196 \div (2 + 3 \times 4)$$

$$= 196 \div (2 + 12)$$

$$= 196 \div 14$$

$$= 14$$

Since, L.H.S = R.H.S

Therefore,  $14 = 4 ? 5 \text{ B } 2$

$$\Rightarrow 14 = 4 (?) 5 \times 2$$

$$\Rightarrow 14 = 4 (?) 10$$

From the above equation, it is clear that (?) means +.

So, A denotes +. Hence, the **first option** is correct.

**Q.**  
**191**

**Directions:** Which two numbers from amongst the given options should be interchanged to make the given equation correct?

$$(134 - 13) \div 27 \times 3 - 6 = 11$$

**Option 1:**

6 and 13

**Option 2:**

3 and 6

**Option 3:**

27 and 11

**Option 4:**

11 and 13

**Correct Answer:**

27 and 11

**Solution:**

**Given:**

$$(134 - 13) \div 27 \times 3 - 6 = 11$$

Replace the given numbers in the options with the original numbers in the given equation.

**First option:** 6 and 13

$$\Rightarrow (134 - 6) \div 27 \times 3 - 13 = 11$$

Solving the L.H.S. of the equation -

$$= 128 \div 27 \times 3 - 13$$

$$= 14.23 - 13$$

$$= 1.23 \neq 11$$

**Second option:** 3 and 6

$$\Rightarrow (134 - 13) \div 27 \times 6 - 3 = 11$$

Solving the L.H.S. of the equation -

$$= 121 \div 27 \times 6 - 3$$

$$= 26.89 - 3$$

$$= 23.89 \neq 11$$

**Third option:** 27 and 11

$$\Rightarrow (134 - 13) \div 11 \times 3 - 6 = 27$$

Solving the L.H.S. of the equation -

$$= 121 \div 11 \times 3 - 6$$

$$= 33 - 6$$

$$= 27 = \text{R.H.S.}$$

**Fourth option:** 11 and 13

$$\Rightarrow (134 - 11) \div 27 \times 3 - 6 = 13$$

Solving the L.H.S. of the equation –

$$= 121 \div 27 \times 3 - 6$$

$$= 13.45 - 6$$

$$= 7.45 \neq 13$$

So, only the third option satisfies the R.H.S. of the given equation.

Hence, the **third option** is correct.

**Q.  
192**

**Directions:** Which two numbers from amongst the given options should be interchanged to make the given equation correct?

$$(42 \div 7) \times 5 = 30 \times 120 \div (10 + 5 \times 2)$$

**Option 1:**

10 and 5

**Option 2:**

2 and 5

**Option 3:**

7 and 2

**Option 4:**

10 and 30

**Correct Answer:**

10 and 30

**Solution:**

**Given:**

$$(42 \div 7) \times 5 = 30 \times 120 \div (10 + 5 \times 2)$$

Replace the given numbers in the options with the original numbers in the given equation.

**First option:** 10 and 5

$$\Rightarrow (42 \div 7) \times 10 = 30 \times 120 \div (5 + 10 \times 2)$$

$$\Rightarrow 6 \times 10 = 30 \times 4.8$$

$$\Rightarrow 60 \neq 144$$

**Second option:** 2 and 5

$$\Rightarrow (42 \div 7) \times 2 = 30 \times 120 \div (10 + 2 \times 5)$$

$$\Rightarrow 6 \times 2 = 30 \times 120 \div (10 + 10)$$

$$\Rightarrow 12 = 30 \times 120 \div 20$$

$$\Rightarrow 12 \neq 180$$

**Third option:** 7 and 2

$$\Rightarrow (42 \div 2) \times 5 = 30 \times 120 \div (10 + 5 \times 7)$$

$$\Rightarrow (21) \times 5 = 30 \times 120 \div (45)$$

$$\Rightarrow 105 = 30 \times 2.67$$

$$\Rightarrow 105 \neq 80$$

**Fourth option:** 10 and 30

$$\Rightarrow (42 \div 7) \times 5 = 10 \times 120 \div (30 + 5 \times 2)$$

$$\Rightarrow (6) \times 5 = 10 \times 120 \div (40)$$

$$\Rightarrow 30 = 10 \times 120 \div 40$$

$$\Rightarrow 30 = 10 \times 3$$

$$\Rightarrow 30 = 30$$

So, only the fourth option satisfies the R.H.S. of the given equation.  
Hence, the **fourth option** is correct.

**Q.  
193**

**Directions:** Which of the following interchange of signs would make the given equation correct?

$$87 - 3 + 39 \div 67 \times 3 = -133$$

**Option 1:**

$\div$  and  $-$

**Option 2:**

$\times$  and  $+$

**Option 3:**

$\times$  and  $-$

**Option 4:**

$-$  and  $+$

**Correct Answer:**

$\div$  and  $-$

**Solution:**

**Given:**

$$87 - 3 + 39 \div 67 \times 3 = -133$$

Interchange the given symbols in the options one by one with the original symbols in the given equation.

**First option:**  $\div$  and  $-$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 87 \div 3 + 39 - 67 \times 3 \\ &= 29 + 39 - 201 \\ &= -133 = \text{R.H.S.} \end{aligned}$$

**Second option:**  $\times$  and  $+$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 87 - 3 \times 39 \div 67 + 3 \\ &= 87 - 1.74 + 3 \\ &= 88.25 \neq -133 \end{aligned}$$

**Third option:**  $\times$  and  $-$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 87 \times 3 + 39 \div 67 - 3 \\ &= 261 + 0.58 - 3 \\ &= 258.58 \neq -133 \end{aligned}$$

**Fourth option:**  $-$  and  $+$

$$\begin{aligned} &\text{Solving the L.H.S. of the equation -} \\ &= 87 + 3 - 39 \div 67 \times 3 \\ &= 90 - 1.74 \\ &= 88.25 \neq -133 \end{aligned}$$

So, only the first option satisfies the R.H.S. of the given equation.

Hence, the **first option** is correct.

**Q.  
194**

**Directions:** Which of the following interchange of signs would make the given equation correct?

$$13 + 26 \times 2 - 5 \div 4 = 6$$

**Option 1:**

$\div$  and  $+$

**Option 2:**

$+$  and  $-$

**Option 3:**

$\times$  and  $-$

**Option 4:**

$\times$  and  $\div$

**Correct Answer:**

$\times$  and  $\div$

**Solution:**

**Given:**

$$13 + 26 \times 2 - 5 \div 4 = 6$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:**  $\div$  and  $+$

$$= 13 \div 26 \times 2 - 5 + 4$$

$$= 1 - 5 + 4$$

$$= 0 \neq 6$$

**Second option:** + and -

$$= 13 - 26 \times 2 + 5 \div 4$$

$$= 13 - 52 + 1.25$$

$$= -37.75 \neq 6$$

**Third option:**  $\times$  and -

$$= 13 + 26 - 2 \times 5 \div 4$$

$$= 39 - 2.50$$

$$= 36.50 \neq 6$$

**Fourth option:**  $\times$  and  $\div$

$$= 13 + 26 \div 2 - 5 \times 4$$

$$= 13 + 13 - 20$$

$$= 6 = \text{R.H.S.}$$

So, only the fourth option satisfies the R.H.S. of the given equation.  
Hence, the **fourth option** is correct.

**Q.  
195**

**Directions:** If + means  $\div$ , - means +,  $\times$  means - and  $\div$  means  $\times$ , then what will come into place of ? in the given equation?

$$6 \div 4 \times 10 + 2 - 3 = ?$$

**Option 1:**

15

*Option 2:*

22

*Option 3:*

20

*Option 4:*

18

*Correct Answer:*

22

**Solution:**

**Given:**

If + means  $\div$ , - means +,  $\times$  means - and  $\div$  means  $\times$

$$6 \div 4 \times 10 + 2 - 3 = ?$$

After replacing the symbols according to the question the equation becomes -

$$\Rightarrow 6 \times 4 - 10 \div 2 + 3 = ?$$

$$= 6 \times 4 - 5 + 3$$

$$= 24 - 5 + 3$$

$$= 22$$

So, 22 is the required answer. Hence, the **second option** is correct.

**Q.  
196**

**Directions:** If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ , then what will come in place of '?' in the following equation?

$$77 \text{ A } 23 \text{ B } 2 \text{ A } 25 \text{ D } 5 = 8 \text{ B } 32 \text{ D } 4 ? 64$$

*Option 1:*

D

*Option 2:*

A

*Option 3:*

C

*Option 4:*

B

**Correct Answer:**

A

**Solution:**

**Given:**

If A denotes +, B denotes  $\times$ , C denotes  $-$ , and D denotes  $\div$ .

$$77 \text{ A } 23 \text{ B } 2 \text{ A } 25 \text{ D } 5 = 8 \text{ B } 32 \text{ D } 4 ? 64$$

After replacing symbols according to the instructions the equation becomes –

$$\Rightarrow 77 + 23 \times 2 + 25 \div 5 = 8 \times 32 \div 4 ? 64$$

$$\Rightarrow 77 + 23 \times 2 + 5 = 8 \times 8 ? 64$$

$$\Rightarrow 77 + 46 + 5 = 64 ? 64$$

$$\Rightarrow 128 = 64 + 64$$

$$\Rightarrow 128 = 128$$

Therefore, to make the R.H.S. = L.H.S. we need to replace (?) with +, and + denotes A. Hence, the **second option** is correct.

**Q.  
197**

**Directions:** Which of the following interchange of signs would make the given equation correct?

$$18 \times 6 - 12 \div 4 + 2 = -43$$

**Option 1:**

– and +

**Option 2:**

× and ÷

**Option 3:**

× and +

**Option 4:**

× and –

**Correct Answer:**

$\times$  and  $\div$

**Solution:**

**Given:**

$$18 \times 6 - 12 \div 4 + 2 = -43$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:**  $-$  and  $+$

Solving the L.H.S. of the equation  $-$

$$= 18 \times 6 + 12 \div 4 - 2$$

$$= 18 \times 6 + 3 - 2$$

$$= 108 + 3 - 2$$

$$= 109 \neq -43$$

**Second option:**  $\times$  and  $\div$

Solving the L.H.S. of the equation  $-$

$$= 18 \div 6 - 12 \times 4 + 2$$

$$= 3 - 48 + 2$$

$$= -43 = \text{R.H.S.}$$

**Third option:**  $\times$  and  $+$

Solving the L.H.S. of the equation  $-$

$$= 18 + 6 - 12 \div 4 \times 2$$

$$= 18 + 6 - 3 \times 2$$

$$= 18 + 6 - 6$$

$$= 18 - 0$$

$$= 18 \neq -43$$

**Fourth option:**  $\times$  and  $-$

Solving the L.H.S. of the equation  $-$

$$\begin{aligned} &= 18 - 6 \times 12 \div 4 + 2 \\ &= 18 - 6 \times 3 + 2 \\ &= 18 - 18 + 2 \\ &= 2 \neq -43 \end{aligned}$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.  
198**

**Directions:** Which of the following interchange of signs would make the given equation correct?

$$52 + 36 \div 9 \times 3 - 1 = 210$$

**Option 1:**  
- and +

**Option 2:**  
× and +

**Option 3:**  
÷ and ×

**Option 4:**  
÷ and -

**Correct Answer:**  
× and +

**Solution:**

**Given:**

$$52 + 36 \div 9 \times 3 - 1 = 210$$

Replace the given symbols in the options one by one with the original symbols in the given equation.

**First option:** - and +

Solving the L.H.S. of the equation -

$$= 52 - 36 \div 9 \times 3 + 1$$

$$= 52 - 12 + 1$$

$$= 41 \neq 210$$

**Second option:**  $\times$  and +

Solving the L.H.S. of the equation -

$$= 52 \times 36 \div 9 + 3 - 1$$

$$= 208 + 3 - 1$$

$$= 210 = \text{R.H.S.}$$

**Third option:**  $\div$  and  $\times$

Solving the L.H.S. of the equation -

$$= 52 + 36 \times 9 \div 3 - 1$$

$$= 52 + 108 - 1$$

$$= 159 \neq 210$$

**Fourth option:**  $\div$  and -

Solving the L.H.S. of the equation -

$$= 52 + 36 - 9 \times 3 \div 1$$

$$= 52 + 36 - 27$$

$$= 61 \neq 210$$

So, only the second option satisfies the R.H.S. of the given equation.  
Hence, the **second option** is correct.

**Q.  
199**

**Directions:** Which two numbers from amongst the given options should be interchanged to make the given equation correct?

$$(357 \div 2 + 3) \div 11 - 4 = (28 \times 3 + 7) \div 9$$

**Option 1:**

11 and 28

**Option 2:**

2 and 3

**Option 3:**

7 and 9

**Option 4:**

2 and 9

**Correct Answer:**

2 and 3

**Solution:**

**Given:**

$$(357 \div 2 + 3) \div 11 - 4 = (28 \times 3 + 7) \div 9$$

Replace the numbers in the options one by one in the given equation.

**First option:** 11 and 28

$$\Rightarrow (357 \div 2 + 3) \div 28 - 4 = (11 \times 3 + 7) \div 9$$

$$\Rightarrow 178.5 \div 28 - 4 = 40 \div 9$$

$$\Rightarrow 2.375 \neq 4.45$$

**Second option:** 2 and 3

$$\Rightarrow (357 \div 3 + 2) \div 11 - 4 = (28 \times 2 + 7) \div 9$$

$$\Rightarrow 121 \div 11 - 4 = 63 \div 9$$

$$\Rightarrow 7 = 7$$

**Third option:** 7 and 9

$$\Rightarrow (357 \div 2 + 3) \div 11 - 4 = (28 \times 3 + 9) \div 7$$

$$\Rightarrow 178.5 \div 11 - 4 = 93 \div 7$$

$$\Rightarrow 12.23 \neq 13.28$$

**Fourth option:** 2 and 9

$$\Rightarrow (357 \div 9 + 3) \div 11 - 4 = (28 \times 3 + 7) \div 2$$

$$= 42.67 \div 11 - 4 = 91 \div 2$$

$$= -0.121 \neq 45.5$$

So, only the second option satisfies the R.H.S. of the given equation.

Hence, the **second option** is correct.