CAREERS 360

PREPARATION Series

Mathematical Operations

All Questions with Solutions

Q. 1 **Directions:** The following equation is incorrect. Which two signs should be interchanged to correct the equation?
15 × 18 – 6 ÷ 20 + 4 = 29

Option 1:
+ and ×

Option 2:
÷ and –

Option 3:
+ and ÷

Option 4:
– and +

Correct Answer:
÷ and –

Solution:
Given:
15 × 18 – 6 ÷ 20 + 4 = 29

Replace the signs given in the options one by one with those in the given equation.
First option: + and ×

= 15 + 18 – 6 ÷ 20 × 4

= 15 + 18 – 0.3 × 4

= 15 + 18 – 1.2

= 31.8 ≠ 29

Second option: ÷ and –

= 15 × 18 ÷ 6 – 20 + 4

= 15 × 3 – 20 + 4

= 45 – 20 + 4

= 29

Third option: + and ÷

= 15 × 18 – 6 + 20 ÷ 4

= 15 × 18 – 6 + 5

= 270 – 6 + 5

= 269 ≠ 29

Fourth option: – and +

= 15 × 18 + 6 ÷ 20 – 4

= 15 × 18 + 0.3 – 4

= 270 + 0.3 – 4

= 270.3 – 4

= 266.3 ≠ 29

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

Q. 2 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
In a certain code language, – represents ×, ÷ represents +, + represents ÷, and × represents –. Find out the answer to the following question.
15 – 6 + 10 × 3 ÷ 2 = ?

Option 1:
24

Option 2:
9

Option 3:
2

Option 4:
8

Correct Answer:
8

Solution:
Given:
15 – 6 + 10 × 3 ÷ 2 = ?

After replacing the mathematical signs as per the directions in the question, the equation becomes –

15 × 6 ÷ 10 – 3 + 2 = ?

= 15 × 0.6 – 3 + 2

= 9 – 3 + 2

= 8

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

Q. 3 **Directions:** In the following question, correct the equation by interchanging two signs.

43 + 9 – 6 ÷ 3 × 8 = 50

Option 1:

÷ and ×

Option 2:

+ and ÷

Option 3:

– and +

Option 4:

– and ×

Correct Answer:

– and +

Solution:

Given:

43 + 9 – 6 ÷ 3 × 8 = 50

Replace the given signs in the options one by one with those in the given equation.

First option: ÷ and ×

= 43 + 9 – 6 × 3 ÷ 8

= 43 + 9 – 6 × 0.375

= 43 + 9 – 2.25

= 49.75 ≠ 50

Second option: + and ÷

= 43 ÷ 9 – 6 + 3 × 8

= 4.78 – 6 + 3 × 8

= 4.78 – 6 + 24

= 22.78 ≠ 50

Third option: – and +

= 43 – 9 + 6 ÷ 3 × 8

= 43 – 9 + 2 × 8

= 43 – 9 + 16

= 50

Fourth option: – and ×

= 43 + 9 × 6 ÷ 3 – 8

= 43 + 9 × 2 – 8

= 43 + 18 – 8

= 53 ≠ 50

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

Q. 4 **Directions:** Which of the following interchange of signs would make the given equation correct?
5 + 3 × 8 – 12 ÷ 4 = 3

Option 1:
– and ÷

Option 2:
+ and ×

Option 3:
+ and ÷

Option 4:
+ and –

Correct Answer:
– and ÷

Solution:
Given:
5 + 3 × 8 – 12 ÷ 4 = 3

Replace the given signs in the options one by one with those in the given equation.
First option: – and ÷
= 5 + 3 × 8 ÷ 12 – 4

= 5 + 2 – 4
= 7 – 4
= 3

Second option: + and ×
= 5 × 3 + 8 – 12 ÷ 4
= 5 × 3 + 8 – 3
= 15 + 8 – 3
= 23 – 3
= 20 ≠ 3

Third option: + and ÷
= 5 ÷ 3 × 8 – 12 + 4
= 1.67 × 8 – 12 + 4
= 13.36 – 12 + 4
= 5.36 ≠ 3

Fourth option: + and –
= 5 – 3 × 8 + 12 ÷ 4
= 5 – 3 × 8 + 3
= 5 – 24 + 3
= –16 ≠ 3

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

Q. 5 **Directions:** A * B means multiply A by B, A @ B means divide A by B, A ? B means add B to A, and A = B means subtract B from A. Then, find the value of –
10 * 10 = 5 * 10 ? 50 @ 10

Option 1:
100

Option 2:
45

Option 3:
1000

Option 4:
55

Correct Answer:
55

Solution:
Given:
10 * 10 = 5 * 10 ? 50 @ 10

After replacing the symbols with the mathematical signs as per the direction, the equation becomes –
10 × 10 – 5 × 10 + 50 ÷ 10
= 10 × 10 – 5 × 10 + 5
= 100 – 50 + 5
= 55

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

Q. 6 **Directions:** If 37 * 14 = 17, 69 * 33 = 34, 91 * 125 = 72, then what should be the value of 28 * 56 = ?

Option 1:
26

Option 2:
42

Option 3:
34

Option 4:
28

Correct Answer:
28

Solution:
Given:
37 * 14 = 17
69 * 33 = 34
91 * 125 = 72

(37 * 14) = 17→(37 + 14) ÷ 3 = 51 ÷ 3 = 17
(69 * 33) = 34→(69 + 33) ÷ 3 = 102 ÷ 3 = 34
(91 * 125) = 72→(91 + 125) ÷ 3 = 216 ÷ 3 = 72

Similarly, for (28 * 56)→(28 + 56) ÷ 3 = 84 ÷ 3 = 28

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

Q. 7 **Directions:** If 5 * 3 = 19 and 8 * 5 = 49, then what should be the value of 6 * 4 = ?

Option 1:
24

Option 2:
28

Option 3:
18

Option 4:
16

Correct Answer:
28

Solution:
Given:
5 * 3 = 19
8 * 5 = 49

$(5 * 3) = 19 \rightarrow (5)^2 - \{(5 - 3) \times 3\} = 25 - \{2 \times 3\} = 25 - 6 = 19$
$(8 * 5) = 49 \rightarrow (8)^2 - \{(8 - 5) \times 5\} = 64 - \{3 \times 5\} = 64 - 15 = 49$
Similarly, for $(6 * 4) \rightarrow (6)^2 - \{(6 - 4) \times 4\} = 36 - \{2 \times 4\} = 36 - 8 = 28$

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

Q. 8 **Directions:** Complete the third equation on the basis of a certain system followed in the first two equations.
(1) 5 * 4 * 2 * 1 = 1425
(2) 7 * 8 * 1 * 6 = 6817
(3) 9 * 3 * 7 * 5 = ?

Option 1:
3795

Option 2:
5397

Option 3:
5973

Option 4:
5379

Correct Answer:
5379

Solution:

Given:

5 * 4 * 2 * 1 = 1425

7 * 8 * 1 * 6 = 6817

The numbers given in the equation are shuffled in a particular order, i.e., the fourth number replaces the first number, the first number replaces the fourth number, and the second number and the third number are at the same place.

5 * 4 * 2 * 1 = 1425

7 * 8 * 1 * 6 = 6817

Similarly, for 9 * 3 * 7 * 5 = 5379

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

Q. 9 **Directions:** If 4 * 2 = 3 and 8 * 4 = 3, then 21 * 7 = ?

Option 1:

4

Option 2:

3

Option 3:

8

Option 4:

16

Correct Answer:
4

Solution:
Given:
4 * 2 = 3
8 * 4 = 3

(4 * 2) = 3→(4 + 2) ÷ 2 = 6 ÷ 2 = 3
(8 * 4) = 3→(8 + 4) ÷ 2 = 12 ÷ 4 = 3
Similarly, for (21 * 7)→(21 + 7) ÷ 7 = 28 ÷ 7 = 4

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

Q. 10 **Directions:** If 3 * 4 = 10, 5 * 8 = 18, 7 * 7 = ?

Option 1:
26

Option 2:
21

Option 3:
28

Option 4:
49

Correct Answer:
21

Solution:
Given:
3 * 4 = 10
5 * 8 = 18

(3 * 4) = 10→(3 × 2) + 4 = 6 + 4 = 10
(5 * 8) = 18→(5 × 2) + 8 = 10 + 8 = 18
Similarly, for (7 * 7)→(7 × 2) + 7 = 14 + 7 = 21

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

Q. 11 **Directions:** Select the correct combination of mathematical signs to replace * signs and to balance the following equation.
48 * 4 * 6 * 3 * 30

Option 1:
–, +, =, ×

Option 2:
÷, =, ×, +

Option 3:
÷, +, ×, =

Option 4:

–, =, ×, +

Correct Answer:

÷, +, ×, =

Solution:

Given:

48 * 4 * 6 * 3 * 30

First option: –, +, =, ×

48 – 4 + 6 = 3 × 30

L.H.S.→48 – 4 + 6

= 54 – 4 = 50

R.H.S.→3 × 30 = 90

L.H.S. ≠ R.H.S

Second option: ÷, =, ×, +

48 ÷ 4 = 6 × 3 + 30

L.H.S.→48 ÷ 4 = 12

R.H.S.→6 × 3 + 30

= 18 + 30 = 48

L.H.S. ≠ R.H.S

Third option: ÷, +, ×, =

48 ÷ 4 + 6 × 3 = 30

L.H.S.→48 ÷ 4 + 6 × 3

= 12 + 6 × 3

= 12 + 18 = 30

R.H.S.→30

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

Fourth option: –, =, ×, +

48 – 4 = 6 × 3 + 30

L.H.S.→48 – 4 = 44

R.H.S.→6 × 3 + 30

= 18 + 30 = 48

L.H.S. ≠ R.H.S

Only the third option satisfies the R.H.S. of the given equation. Hence, the **third option** is correct.

Q. 12 **Directions:** If 1 * 2 = 1, 2 * 3 = –1 and 3 * 4 = –5, then find the value of 7 * 9 = ?

Option 1:
–47

Option 2:
–29

Option 3:
–2

Option 4:
–9

Correct Answer:
–47

Solution:
Given:
1 * 2 = 1
2 * 3 = –1
3 * 4 = –5

(1 * 2 = 1→(1 + 2) – (1 × 2) = 3 – 2 = 1
(2 * 3) = –1→(2 + 3) – (2 × 3) = 5 – 6 = –1
(3 * 4) = –5→(3 + 4) – (3 × 4) = 7 – 12 = –5
Similarly, (7 * 9)→(7 + 9) – (7 × 9) = 16 – 63 = –47

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

Q. 13 **Directions:** Some equations are solved based on a certain system. Find out the correct answer for the unsolved equation on that basis.
If 3 * 2 * 8 * 4 = 632, 2 * 4 * 4 * 4 = 816, then 3 * 3 * 5 * 1 = ?

Option 1:
95

Option 2:
45

Option 3:
315

Option 4:
184

Correct Answer:
95

Solution:
Given:
3 * 2 * 8 * 4 = 632
2 * 4 * 4 * 4 = 816

(3 * 2 * 8 * 4) = 632→(3 × 2) = 6; (8 × 4) = 32→632
(2 * 4 * 4 * 4) = 816→(2 × 4) = 8; (4 × 4) = 16→816
Similarly, for (3 * 3 * 5 * 1)→(3 × 3) = 9; (5 × 1) = 5→95

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

Q. 14 **Directions:** The following equations have been solved based on a certain pattern. Find the correct answer for the unsolved equation on that basis.
If 7 * 4 * 3 = 437, 8 * 6 * 4 = 648, then 4 * 3 * 6 = ?

Option 1:
346

Option 2:
364

Option 3:
643

Option 4:
463

Correct Answer:
364

Solution:
Given:
7 * 4 * 3 = 437
8 * 6 * 4 = 648

Here, the numbers given in the equation are shuffled in a particular order, i.e., the second number replaces the first number, the third number replaces the second number, and the first number replaces the third number.
(7 * 4 * 3) = 437
(8 * 6 * 4) = 648
Similarly, for (4 * 3 * 6) = 364

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

Q. 15 **Directions:** If 13 * 45 = 29, 24 * 58 = 41, 74 * 32 = 53, what should 97 * 47 be?

Option 1:
73

Option 2:
72

Option 3:
63

Option 4:
64

Correct Answer:
72

Solution:
Given:
13 * 45 = 29
24 * 58 = 41
74 * 32 = 53

(13 * 45) = 29→(13 + 45) ÷ 2 = 58 ÷ 2 = 29
(24 * 58) = 41→(24 + 58) ÷ 2 = 82 ÷ 2 = 41
(74 * 32) = 53→(74 + 32) ÷ 2 =106 ÷ 2 = 53

Similarly, for (97 * 47)→(97 + 47) ÷ 2 = 144 ÷ 2 = 72

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

Q. 16 **Directions:** The following equations have been solved based on a certain pattern. Find the correct answer for the unsolved equation on that basis.
If 2 * 3 * 5 = 523, 6 * 4 * 1 = 164, 8 * 2 * 4 = 482, then 6 * 8 * 2 = ?

Option 1:
826

Option 2:
268

Option 3:
286

Option 4:
628

Correct Answer:
268

Solution:

Given:

2 * 3 * 5 = 523

6 * 4 * 1 = 164

8 * 2 * 4 = 482

Here, the numbers given in the equation are shuffled in a particular order, i.e., the third number replaces the first number, the first number replaces the second number, and the second number replaces the third number.

(2 * 3 * 5) = 523

(6 * 4 * 1) = 164

(8 * 2 * 4) = 482

Similarly, for (6 * 8 * 2) = 268

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

Q. 17 **Directions:** Identify the correct response from the given premises stated according to the symbols.
In a certain code language, – represents ×, ÷ represents +, + represents ÷ and × represents –. Find out the answer to the following equation.
19 ÷ 2 – 35 + 10 × 6 = ?

Option 1:

20

Option 2:
14

Option 3:
32

Option 4:
27

Correct Answer:
20

Solution:
Given:
19 ÷ 2 – 35 + 10 × 6 = ?

After replacing the signs as per the direction given in the question, the equation becomes –
19 + 2 × 35 ÷ 10 – 6
= 19 + 2 × 3.5 – 6
= 19 + 7 – 6 = 20

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

Q. 18 **Directions:** If P denotes multiplied by, R denotes subtracted from, S denotes added to and Q denotes divided by, then which of the following equations is true?

Option 1:
18 R 60 Q 15 S 2 = 8

Option 2:
15 S 16 Q 2 P 4 = 47

Option 3:
3 P 5 R 18 Q 3 = 6

Option 4:
15 S 28 Q 4 P 2 = 27

Correct Answer:
15 S 16 Q 2 P 4 = 47

Solution:
Given:
P means multiplied by, R means subtracted from, S means added to, Q means divided by.

Let's check the options –
First option: 18 R 60 Q 15 S 2 = 8
⇒ 18 – 60 ÷ 15 + 2 = 8
On solving the L.H.S. of the equation –
= 18 – 60 ÷ 15 + 2
= 18 – 4 + 2
= 20 – 4
= 16 ≠ 8
Second option: 15 S 16 Q 2 P 4 = 47

$\Rightarrow 15 + 16 \div 2 \times 4 = 47$

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

$= 15 + 16 \div 2 \times 4$

$= 15 + 8 \times 4$

$= 15 + 32$

$= 47$

Third option: 3 P 5 R 18 Q 3 = 6

$\Rightarrow 3 \times 5 - 18 \div 3 = 6$

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

$= 3 \times 5 - 18 \div 3$

$= 3 \times 5 - 6$

$= 15 - 6$

$= 9 \neq 6$

Fourth option: 15 S 28 Q 4 P 2 = 27

$\Rightarrow 15 + 28 \div 4 \times 2 = 27$

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

$= 15 + 28 \div 4 \times 2$

$= 15 + 7 \times 2$

$= 15 + 14$

$= 29 \neq 27$

So, the equation is true only for the second option. Hence, the **second option** is correct.

Q. 19 **Directions:** If K denotes multiplied by, M denotes subtracted from, J denotes added to and L denotes divided by, then
44 M 24 K 56 L 14 J 60 = ?

Option 1:
16

Option 2:
72

Option 3:
8

Option 4:
140

Correct Answer:
8

Solution:
Given:
44 M 24 K 56 L 14 J 60 = ?
Here, K means multiplied by, J means added to, M means subtracted from, and L means divided by.

Let's, find the value of 44 M 24 K 56 L 14 J 60 –
= 44 – 24 × 56 ÷ 14 + 60
= 44 – 24 × 4 + 60
= 44 – 96 + 60
= 8

So, the equation is equal to 8. Hence, the **third option** is correct.

Q. 20 **Directions:** If # means subtraction, & means division, @ means addition and % means multiplication, then 505 & 5 # 4 @ 20 % 5 = ?

Option 1:
211

Option 2:
197

Option 3:
210

Option 4:
195

Correct Answer:
197

Solution:

Given:

505 & 5 # 4 @ 20 % 5 = ?

means subtraction, & means division, @ means addition and % means multiplication.

Substituting the signs, the equation becomes –

= 505 ÷ 5 – 4 + 20 × 5

= 101 – 4 + 20 × 5

= 101 – 4 + 100

= 201 – 4

= 197

So, the equation is equal to 197. Hence, the **second option** is correct.

Q. 21 **Directions:** Correct the following equation by interchanging the two signs and two numbers.

7 × 6 + 5 – 4 = 33

Option 1:

–, ×, and 4, 5

Option 2:

×, +, and 4, 5

Option 3:

+, –, and 5, 6

Option 4:

×, –, and 5, 6

Correct Answer:

+, –, and 5, 6

Solution:

Given:

7 × 6 + 5 – 4 = 33

Let's check the options –

First option: –, ×, and 4, 5

⇒ 7 – 6 + 4 × 5 = 33

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

= 7 – 6 + 4 × 5

= 7 – 6 + 20

= 21 ≠ 33

Second option: ×, +, and 4, 5

⇒ 7 + 6 × 4 – 5 = 33

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

= 7 + 6 × 4 – 5

= 7 + 24 – 5

= 26 ≠ 33

Third option: +, –, and 5, 6

⇒ 7 × 5 – 6 + 4 = 33

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

= 7 × 5 – 6 + 4

= 35 – 6 + 4

= 33

Fourth option: ×, –, and 5, 6

⇒ 7 – 5 + 6 × 4 = 33

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

= 7 – 5 + 6 × 4

= 7 – 5 + 24

= 26 ≠ 33

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

Q. 22 **Directions:** If 3 @ 3 * 3 = 3 and 48 @ 4 * 3 = 36, then 91 @ 13 * 2 = ?

Option 1:
4

Option 2:
8

Option 3:
10

Option 4:
14

Correct Answer:
14

Solution:
Given:
3 @ 3 * 3 = 3, 48 @ 4 * 3 = 36

The pattern in the equation 3 @ 3 * 3 = 3 is 3 ÷ 3 × 3 = 1 × 3 = 3
The pattern in the equation 48 @ 4 * 3 = 36 is 48 ÷ 4 × 3 = 12 × 3 = 36

Thus, the symbol @ means ÷, and the symbol * means
× respectively.
Using the same pattern in equation 91 @ 13 * 2
The equation becomes –
91 ÷ 13 × 2 = 7 × 2 = 14

So, the equation is equal to 14. Hence, the **fourth option** is correct.

Q. 23 **Directions:** If 19 (36) 13 and 37 (81) 28, then what is the value of A in 43 (A) 38?

Option 1:
49

Option 2:
25

Option 3:
34

Option 4:
64

Correct Answer:
25

Solution:
Given:
19 (36) 13, 37 (81) 28

The pattern in the equation 19 (36) 13 is 19 – 13 = 6; 6^2 = 36
The pattern in the equation 37 (81) 28 is 37 – 28 = 9; 9^2 = 81
Similarly, 43 (A) 38→43 – 38 = 5; 5^2 = 25

So, the value of A is 25. Hence, the **second option** is correct.

Q. 24 **Directions:** If 4 × 9 × 3 = 4 and 5 × 3 × 1 = 3, then 9 × 9 × 7 = ?

Option 1:
5

Option 2:
6

Option 3:
7

Option 4:
9

Correct Answer:
5

Solution:
Given:
$4 \times 9 \times 3 = 4, 5 \times 3 \times 1 = 3$

The pattern in the equation$\rightarrow 4 \times 9 \times 3 = 4$ is $4 + 9 + 3 = 16 = 4^2$
The pattern in the equation$\rightarrow 5 \times 3 \times 1 = 3$ is $5 + 3 + 1 = 9 = 3^2$

Here, the sign × means +.
Using the same pattern in equation $9 \times 9 \times 7$
The equation becomes –
$9 + 9 + 7 = 25 = 5^2$
Therefore, the square root of 25 is equal to 5.

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

Q. 25 **Directions:** If $(3)^2$ @ 1 * 7 = 98 and $(4)^2$ @ 2 * 16 = 178, then $(5)^2$ @ 3 * 9 = ?

Option 1:
218

Option 2:
262

Option 3:
253

Option 4:
259

Correct Answer:
262

Solution:
Given:
$(3)^2$ @ 1 * 7 = 98, $(4)^2$ @ 2 * 16 = 178

Use the following operations in place of the given symbols @ and * –
Like, $(3)^2$ @ 1 * 7 = 98
$(3)^2 \times 10 + 1 + 7$
$= 9 \times 10 + 1 + 7$
$= 90 + 1 + 7 = 98$
And, $(4)^2$ @ 2 * 16 = 178
$(4)^2 \times 10 + 2 + 16$
$= 16 \times 10 + 2 + 16$
$= 160 + 2 + 16 = 178$
Similarly, $(5)^2$ @ 3 * 9 = ?

$= (5)^2 \times 10 + 3 + 9$
$= 25 \times 10 + 3 + 9$
$= 250 + 3 + 9 = 262$

So, the equation is equal to 262. Hence, the **second option** is correct.

Q. 26 **Directions:** If 6 @ 4 @ 7 = 101 and 2 @ 5 @ 11 = 150, then what is the value of A in A @ 8 @ 9 = 289?

Option 1:
5

Option 2:
8

Option 3:
12

Option 4:
17

Correct Answer:
12

Solution:
Given:
6 @ 4 @ 7 = 101, 2 @ 5 @ 11 = 150

Use the following operations in place of the given symbols @.
Like, 6 @ 4 @ 7 = 101 i
$= 6^2 + 4^2 + 7^2 = 36 + 16 + 49 = 101$
And, 2 @ 5 @ 11 = 150
$= 2^2 + 5^2 + 11^2 = 4 + 25 + 121 = 150$
Similarly, A @ 8 @ 9 = 289
$\Rightarrow A^2 + 8^2 + 9^2 = 289$
$\Rightarrow A^2 + 64 + 81 = 289$
$\Rightarrow A^2 + 145 = 289$
$\Rightarrow A^2 = 289 - 145$
$\Rightarrow A^2 = 144$
$\Rightarrow A = \sqrt{144}$
$\Rightarrow A = 12$

So, the value of A is equal to 12. Hence, the **third option** is correct.

Q. 27 **Directions:** If 27 (15) 33 and 41 (13) 53, then what is the value of A in 26 (A) 35?

Option 1:
16

Option 2:
13

Option 3:
14

Option 4:
11

Correct Answer:
16

Solution:
Given:
27 (15) 33; 41 (13) 53

Like, 27 (15) 33 is (2 + 7) + (3 + 3) = 9 + 6 = 15
And, 41 (13) 53 is (4 + 1) + (5 + 3) = 5 + 8 = 13
Similarly, 26 (A) 35 is (2 + 6) + (3 + 5) = 8 + 8 = 16 = A

So, the value of A is equal to 16. Hence, the **first option** is correct.

Q. 28 **Directions:** If 18 × 12 = 206 and 19 × 22 = 408, then 23 × 36 = ?

Option 1:
878

Option 2:
818

Option 3:
794

Option 4:
776

Correct Answer:
818

Solution:
Given:
18 × 12 = 206; 19 × 22 = 408; 23 × 36 = ?

Like, 18 × 12 = 206 is 18 × 12 = 216. Then→216 – 10 = 206
And, 19 × 22 = 408 is 19 × 22 = 418. Then→418 – 10 = 408
Similarly, 23 × 36 is 23 × 36 = 828. Then→828 – 10 = 818

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

Q. 29 **Directions:** If 11 & 25 = 18, 12 & 20 = 16 then, what is the value of 4 & 50 = ?

Option 1:
42

Option 2:
17

Option 3:
27

Option 4:
37

Correct Answer:
27

Solution:
Given:
11 & 25 = 18, 12 & 20 = 16, 4 & 50 = ?

Use the following operations in place of the given symbols & –
Like, 11 & 25 = 18→(11 + 25) ÷ 2 = 36 ÷ 2 = 18
And, 12 & 20 = 16→(12 + 20) ÷ 2 = 32 ÷ 2 = 16
Similarly, follow the same pattern for 4 & 50→(4 + 50) ÷ 2 = 54 ÷ 2 = 27

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

Q. 30 **Directions:** If 35 % 31 = 12 and 92 % 30 = 14, then what is the value of 15 % 24 = ?

Option 1:
12

Option 2:
25

Option 3:
33

Option 4:
28

Correct Answer:
12

Solution:
Given:
35 % 31 = 12, 92 % 30 = 14, 15 % 24 = ?

Like, 35 % 31 = 12→(3 + 5) + (3 + 1) = 8 + 4 = 12
And, 92 % 30 = 14→(9 + 2) + (3 + 0) = 11 + 3 = 14
Similarly, 15 % 24→(1 + 5) + (2 + 4) = 6 + 6 = 12

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

Q. 31 **Directions:** If 6 # 30 = 5, 8 # 24 = 3, 7 # 28 = 4 then, what is the value of 8 # 40 = ?

Option 1:
47

Option 2:
4

Option 3:
5

Option 4:
24

Correct Answer:
5

Solution:
Given:
6 # 30 = 5, 8 # 24 = 3, 7 # 28 = 4, 8 # 40 = ?

The interpretation of # is the second number divided by the first number. So, replace # with ÷.
Like, 6 # 30 = 5→30 ÷ 6 = 5
8 # 24 = 3→24 ÷ 8 = 3
7 # 28 = 4→28 ÷ 7 = 4
Similarly, 8 # 40→40 ÷ 8 = 5

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

Q. 32 **Directions:** If 3 % 2 = 50, 2 % 4 = 60 then, what is the value of 5 % 4 = ?

Option 1:
16

Option 2:
9

Option 3:
90

Option 4:
20

Correct Answer:
90

Solution:
Given:
3 % 2 = 50, 2 % 4 = 60, 5 % 4 = ?

Substitute + in place of % and multiply it by 10 –
3 % 2 = 50 is (3 + 2) × 10 = 5 × 10 = 50
2 % 4 = 60 is (2 + 4) × 10 = 6 × 10 = 60
Similarly→5 % 4 is (5 + 4) × 10 = 9 × 10 = 90

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

Q. 33 **Directions:** If 23 & 35 = 13, 3 & 5 = 8, then what is the value of 4 &13 = ?

Option 1:
8

Option 2:
14

Option 3:
6

Option 4:
49

Correct Answer:
8

Solution:
Given:
23 & 35 = 13, 3 & 5 = 8, 4 & 13 = ?

Like, 23 & 35 = 13→(2 + 3) + (3 + 5) = 5 + 8 = 13
And, 3 & 5 = 8→3 + 5 = 8
Similarly, 4 & 13→(4) + (1 + 3) = 4 + 4 = 8

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

Q. 34 **Directions:** In the following question, identify the correct response from the given premises stated according to the following symbols.
If × denotes added to, + denotes subtracted from, – denotes multiplied by, then,
14 × 12 – 16 + 18 = ?

Option 1:
430

Option 2:
180

Option 3:
168

Option 4:
188

Correct Answer:
188

Solution:
Given:
14 × 12 – 16 + 18 = ?

On replacing the symbols as per the given information, the equation becomes –
= 14 + 12 × 16 – 18
= 14 + 192 – 18
= 206 – 18
= 188

So, 188 is the answer to the given equation. Hence, the **fourth option** is correct.

Q. 35 **Directions:** In the following question, correct the equation by interchanging two signs.
6 + 8 ÷ 4 – 4 = 8

Option 1:
÷ and =

Option 2:
÷ and +

Option 3:
÷ and –

Option 4:
+ and –

Correct Answer:

+ and –

Solution:

Given:

6 + 8 ÷ 4 – 4 = 8

Let's check the options –

First option: ÷ and =

6 + 8 = 4 – 4 ÷ 8

LHS→6 + 8 = 14

RHS→4 – 4 ÷ 8

= 4 – 0.5

= 3.5

LHS ≠ RHS

Second option: ÷ and +

6 ÷ 8 + 4 – 4 = 8

LHS→6 ÷ 8 + 4 – 4

= 0.75 + 4 – 4

= 0.75

RHS→8

LHS ≠ RHS

Third option: ÷ and –

6 + 8 – 4 ÷ 4 = 8

LHS→6 + 8 – 4 ÷ 4

= 6 + 8 – 1

= 14 – 1

= 13

RHS→8

LHS ≠ RHS

Fourth option: + and –

6 – 8 ÷ 4 + 4 = 8

LHS→6 – 8 ÷ 4 + 4

= 6 – 2 + 4

= 10 – 2

= 8

RHS→8

LHS = RHS

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

Q. 36 **Directions:** In the following question, correct the given equation by interchanging two numbers.

8 × 3 ÷ 4 + 9 – 5 = 16

Option 1:

3 and 4

Option 2:

4 and 8

Option 3:

5 and 3

Option 4:
5 and 9

Correct Answer:
5 and 3

Solution:
Given:
$8 \times 3 \div 4 + 9 - 5 = 16$

Let's check the options –
First option: 3 and 4
$\Rightarrow 8 \times 4 \div 3 + 9 - 5 = 16$
Solving the L.H.S. of the equation –
$= 8 \times 4 \div 3 + 9 - 5$
$= 8 \times 1.33 + 9 - 5$
$= 10.64 + 9 - 5$
$= 14.64 \neq 16$
Second option: 4 and 8
$\Rightarrow 4 \times 3 \div 8 + 9 - 5 = 16$
Solving the L.H.S. of the equation –
$= 4 \times 3 \div 8 + 9 - 5$
$= 4 \times 0.375 + 9 - 5$
$= 1.5 + 9 - 5$
$= 10.5 - 5$
$= 5.5 \neq 16$
Third option: 5 and 3
$\Rightarrow 8 \times 5 \div 4 + 9 - 3 = 16$
Solving the L.H.S. of the equation –

= 8 × 5 ÷ 4 + 9 – 3
= 8 × 1.25 + 9 – 3
= 10 + 9 – 3
= 19 – 3
= 16

Fourth option: 5 and 9
⇒ 8 × 3 ÷ 4 + 5 – 9 = 16
Solving the L.H.S. of the equation –
= 8 × 3 ÷ 4 + 5 – 9
= 8 × 0.75 + 5 – 9
= 6 + 5 – 9
= 11 – 9
= 2 ≠ 16

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

Q. 37 **Directions:** In the following question, correct the equation by interchanging the two signs.
6 ÷ 17 × 51 + 6 – 12 = –4

Option 1:
× and ÷

Option 2:
+ and ÷

Option 3:
+ and –

Option 4:
– and ÷

Correct Answer:
× and ÷

Solution:
Given:
6 ÷ 17 × 51 + 6 – 12 = –4

Let's check the options –
First option: × and ÷
⇒ 6 × 17 ÷ 51 + 6 – 12 = –4
Solving the L.H.S. of the equation –
= 6 × 17 ÷ 51 + 6 – 12
= 2 + 6 – 12
= 8 – 12
= –4
Second option: + and ÷
⇒ 6 + 17 × 51 ÷ 6 – 12 = –4
Solving the L.H.S. of the equation –
= 6 + 17 × 51 ÷ 6 – 12
= 6 + 17 × 8.5 – 12
= 6 + 144.5 – 12
= 150.5 – 12
= 138.5 ≠ –4

Third option: + and –

⇒ 6 ÷ 17 × 51 – 6 + 12 = –4

Solving the L.H.S. of the equation –

= 6 ÷ 17 × 51 – 6 + 12

= 18 – 6 + 12

= 30 – 6

= 24 ≠ –4

Fourth option: – and ÷

⇒ 6 – 17 × 51 + 6 ÷ 12 = –4

Solving the L.H.S. of the equation –

= 6 – 17 × 51 + 6 ÷ 12

= 6 – 17 × 51 + 0.5

= 6 – 867 + 0.5

= 6.5 – 867

= –860.5 ≠ –4

Only the first option satisfies the equation. Hence, the **first option** is correct.

Q. 38 **Directions:** In the following question, identify the correct response from the given premises stated according to the following symbols. In a certain code language, + represents ×, – represents +, × represents ÷ and ÷ represents –. What is the answer to the following equation?

80 × 16 ÷ 4 + 2 – 8 = ?

Option 1:
11

Option 2:
64

Option 3:
30

Option 4:
5

Correct Answer:
5

Solution:
Given:
80 × 16 ÷ 4 + 2 – 8 = ?

On replacing the symbols as per the instruction, the equation becomes –
= 80 ÷ 16 – 4 × 2 + 8
= 5 – 4 × 2 + 8
= 5 – 8 + 8
= 13 – 8
= 5

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

Q. 39 **Directions:** $(2)^{*} * 4 = 2$, and $(4)^{*} * 4 = 16$, then what is the value of A in $(6)^{*} * A = 18$?

Option 1:
12

Option 2:
14

Option 3:
16

Option 4:
20

Correct Answer:
12

Solution:
Given:
$(2)^{*} * 4 = 2$; $(4)^{*} * 4 = 16$

Like, $(2)^{*} * 4 = 2$; $2^3 \div 4 = 8 \div 4 = 2$
$(4)^{*} * 4 = 16$; $4^3 \div 4 = 64 \div 4 = 16$
Similarly, $(6)^{*} * A = 18$;
$\Rightarrow 6^3 \div A = 18$

⇒ 216 ÷ A = 18
⇒ A = 216 ÷ 18
⇒ A = 12

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

Q. 40 **Directions:** If 6 * 9 – 4 = 58 and 3 * 9 – 7 = 34, then in the expression, A * 4 – 9 = 91, what is the value of A?

Option 1:
6.5

Option 2:
17.5

Option 3:
20.5

Option 4:
30.5

Correct Answer:
20.5

Solution:
Given:
6 * 9 – 4 = 58 and 3 * 9 – 7 = 34

Like, 6 * 9 – 4 = 58→(6 × 9) + 4 = 54 + 4 = 58

3 * 9 – 7 = 34→(9 × 3) + 7 = 27 + 7 = 34

Similarly, A * 4 – 9 = 91

⇒ (A × 4) + 9 = 91

⇒ A × 4 = 91 – 9

⇒ A × 4 = 82

⇒ A = 82 ÷ 4

⇒ A = 20.5

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

Q. 41 **Directions:** If 4 * 7 * 2 = 361 and 5 * 9 * 1 = 480, then 2 * 1 * 3 = ?

Option 1:
312

Option 2:
324

Option 3:
210

Option 4:
102

Correct Answer:
102

Solution:
Given:
4 * 7 * 2 = 361 and 5 * 9 * 1 = 480

Like, 4 * 7 * 2 = 361→4 – 1 = 3; 7 – 1 = 6; 2 – 1 = 1→361
5 * 9 * 1 = 480; 5 – 1 = 4→9 – 1 = 8; 1 – 1 = 0→480
Similarly, 2 * 1 * 3→2 – 1 = 1; 1 – 1 = 0; 3 – 1 = 2→102

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

Q. 42 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
In a certain code language, + represents ×, – represents +, × represents ÷, and ÷ represents –. What is the answer to the following question?
27 × 3 ÷ 30 + 5 – 125 = ?

Option 1:
69

Option 2:
67

Option 3:
–15

Option 4:
–16

Correct Answer:
–16

Solution:
Given:
27 × 3 ÷ 30 + 5 – 125 = ?

After replacing the symbols as per the instruction, the equation becomes –
= 27 ÷ 3 – 30 × 5 + 125
= 9 – 30 × 5 + 125
= 9 – 150 + 125
= 134 – 150
= –16

–16 is the answer to the given equation. Hence, the **fourth option** is correct.

Q. 43 **Directions:** In the following question, you must identify the correct response from the given premises according to the following symbols.
In a certain code language, + represents ×, – represents +, × represents ÷, and ÷ represents –. What is the answer to the following question?
50 + 5 – 700 × 28 = ?

Option 1:
94

Option 2:
100

Option 3:
90

Option 4:
275

Correct Answer:
275

Solution:
Given:
50 + 5 – 700 × 28 = ?

After replacing the symbols as per the instruction, the equation becomes –
= 50 × 5 + 700 ÷ 28
= 50 × 5 + 25
= 250 + 25
= 275

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

Q. 44 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
In a certain code language, + represents ×, – represents +, × represents ÷, and ÷ represents –. What is the answer to the following question?
234 × 9 – 12 + 4 = ?

Option 1:
74

Option 2:
48

Option 3:
94

Option 4:
82

Correct Answer:
74

Solution:
Given:
234 × 9 – 12 + 4 = ?

After replacing the symbols as per the instruction, the equation becomes –
= 234 ÷ 9 + 12 × 4
= 26 + 12 × 4
= 26 + 48
= 74

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

Q. 45 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If ÷ denotes multiplied by, + denotes subtracted from, × denotes added to, and – denotes divided by then
12 – 6 + 28 × 3 ÷ 9 = ?

Option 1:
–24

Option 2:
1

Option 3:
–53

Option 4:
8

Correct Answer:
1

Solution:
Given:
12 – 6 + 28 × 3 ÷ 9 = ?

After replacing the symbols as per the instruction, the equation becomes –
= 12 ÷ 6 – 28 + 3 × 9
= 2 – 28 + 3 × 9
= 2 – 28 + 27
= 1

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

Q. 46 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + denotes divided by, × denotes added to, ÷ denotes subtracted from and – denotes multiplied by, then
54 + 162 – 18 × 12 ÷ 6 = ?

Option 1:
4

Option 2:
16

Option 3:
12

Option 4:
10

Correct Answer:
12

Solution:
Given:
54 + 162 – 18 × 12 ÷ 6 = ?

After replacing the symbols as per the instruction, the equation becomes –

= 54 ÷ 162 × 18 + 12 – 6

= 6 + 12 – 6

= 12

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

Q. 47 **Directions:** If K means subtracted from, L means divided by, M means added to and D means multiplied by, then

96 L 4 K 6 M 11 D 9 = ?

Option 1:

117

Option 2:

125

Option 3:

120

Option 4:

145

Correct Answer:
117

Solution:
Given:
96 L 4 K 6 M 11 D 9 = ?

On replacing the letters with the mathematical signs, the equation becomes –
= 96 ÷ 4 – 6 + 11 × 9
= 24 – 6 + 11 × 9
= 24 – 6 + 99
= 123 – 6
= 117

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

Q. 48 **Directions:** If S denotes multiplied by, V denotes subtracted from, M denotes added to and L denotes divided by, then,
7 V 24 M 77 L 11 S 5 = ?

Option 1:
21

Option 2:
18

Option 3:
35

Option 4:
27

Correct Answer:
18

Solution:
Given:
7 V 24 M 77 L 11 S 5 = ?

On replacing the letters with the assigned mathematical signs, the equation becomes –
= 7 – 24 + 77 ÷ 11 × 5
= 7 – 24 + 7 × 5
= 7 – 24 + 35
= 42 – 24
= 18

So, 18 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 49 **Directions:** If S denotes multiplied by, V denotes subtracted from, M denotes added to and L denotes divided by, then
2 V 13 M 77 L 11 S 5 = ?

Option 1:
23

Option 2:
24

Option 3:
34

Option 4:
44

Correct Answer:
24

Solution:
Given:
2 V 13 M 77 L 11 S 5 = ?

On replacing the letters with the assigned mathematical signs, the equation becomes –
= 2 – 13 + 77 ÷ 11 × 5

= 2 – 13 + 7 × 5
= 2 – 13 + 35
= 37 – 13
= 24

So, 24 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 50 **Directions:** If A means minus, B means divided by, C means plus and D means multiplied by, then 54 B 6 A 4 C 2 D 5 = ?

Option 1:
15

Option 2:
21

Option 3:
16

Option 4:
18

Correct Answer:
15

Solution:

Given:
54 B 6 A 4 C 2 D 5 = ?

On replacing the letters with the assigned mathematical signs, the equation becomes –
= 54 ÷ 6 – 4 + 2 × 5
= 9 – 4 + 2 × 5
= 9 – 4 + 10
= 15

So, 15 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 51 **Directions:** If A means subtraction, B means division, C means addition and D means multiplication, then 294 B 7 A 40 C 33 D 11 = ?

Option 1:
369

Option 2:
365

Option 3:
368

Option 4:
363

Correct Answer:
365

Solution:
Given:
294 B 7 A 40 C 33 D 11 = ?

On replacing the letters with the mathematical signs, the equation becomes –
= 294 ÷ 7 – 40 + 33 × 11
= 42 – 40 + 33 × 11
= 42 – 40 + 363
= 405 – 40
= 365

So, 365 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 52 **Directions:** If S denotes multiplied by, V denotes subtracted from, M denotes added to and L denotes divided by, then
72 L 24 S 3 V 7 M 2 = ?

Option 1:
4

Option 2:
6

Option 3:
8

Option 4:
10

Correct Answer:
4

Solution:
Given:
72 L 24 S 3 V 7 M 2 = ?

On replacing the letters with the assigned mathematical signs, the equation becomes –
= 72 ÷ 24 × 3 – 7 + 2
= 3 × 3 – 7 + 2
= 9 – 7 + 2
= 11 – 7
= 4

So, 4 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 53 **Directions:** If A means add, B means divide, C means multiply and D means subtract, then
180 B 36 C 5 A 8 D 32 = ?

Option 1:
0

Option 2:
3

Option 3:
1

Option 4:
2

Correct Answer:
1

Solution:
Given:
180 B 36 C 5 A 8 D 32 = ?

On replacing the letters with mathematical signs, the equation becomes –
= 180 ÷ 36 × 5 + 8 – 32
= 5 × 5 + 8 – 32

= 25 + 8 – 32
= 33 – 32
= 1

So, 1 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 54 **Directions:** If S denotes multiplied by, V denotes subtracted from, M denotes added to, and L denotes divided by, then
96 L 8 S 4 V 16 M 9 = ?

Option 1:
32

Option 2:
37

Option 3:
41

Option 4:
48

Correct Answer:
41

Solution:

Given:
96 L 8 S 4 V 16 M 9 = ?

On replacing the letters with mathematical signs, the equation becomes –
= 96 ÷ 8 × 4 – 16 + 9
= 12 × 4 – 16 + 9
= 48 – 16 + 9
= 57 – 16
= 41

So, 41 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 55 **Directions:** If # means subtraction, & means division, @ means addition and % means multiplication, then 217 & 7 # 3 @ 2 % 7 = ?

Option 1:
21

Option 2:
19

Option 3:
22

Option 4:
42

Correct Answer:
42

Solution:
Given:
217 & 7 # 3 @ 2 % 7 = ?

On replacing the symbols with mathematical signs, the equation becomes –
= 217 ÷ 7 – 3 + 2 × 7
= 31 – 3 + 2 × 7
= 31 – 3 + 14
= 45 – 3
= 42

So, 42 is the required answer to the given equation. Hence, the **fourth option** is correct.

Q. 56 **Directions:** If * denotes added to, & denotes divided by, @ denotes multiplied by and % denotes subtracted from, then
399 & 19 @ 21 % 41 * 100 = ?

Option 1:
458

Option 2:
500

Option 3:
575

Option 4:
600

Correct Answer:
500

Solution:
Given:
399 & 19 @ 21 % 41 * 100 = ?

On replacing the symbols with mathematical signs, the equation becomes –
= 399 ÷ 19 × 21 – 41 + 100
= 21 × 21 – 41 + 100
= 441 – 41 + 100
= 541 – 41
= 500

So, 500 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 57 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If – stands for division, + stands for multiplication, ÷ stands for subtraction and × stands for addition, then which of the following equations holds true?

Option 1:
4 × 5 + 9 – 3 ÷ 4 = 15

Option 2:
4 – 5 × 9 + 3 ÷ 4 = 32

Option 3:
4 – 5 ÷ 18 × 3 – 4 = 70

Option 4:
4 ÷ 5 + 9 – 3 ÷ 4 = 81

Correct Answer:
4 × 5 + 9 – 3 ÷ 4 = 15

Solution:
Given:
– stands for division, + stands for multiplication, ÷ stands for subtraction, and × stands for addition.

Let's check the options –

First option: $4 \times 5 + 9 - 3 \div 4 = 15$

On interchanging the symbols, the equation becomes –

$4 + 5 \times 9 \div 3 - 4 = 15$

Solving the L.H.S. of the equation –

$= 4 + 5 \times 3 - 4$

$= 4 + 15 - 4$

$= 19 - 4$

$= 15$

Second option: $4 - 5 \times 9 + 3 \div 4 = 32$

On interchanging the symbols, the equation becomes –

$4 \div 5 + 9 \times 3 - 4 = 32$

Solving the L.H.S. of the equation –

$= 0.8 + 9 \times 3 - 4$

$= 0.8 + 27 - 4$

$= 27.8 - 4$

$= 23.8 \neq 32$

Third option: $4 - 5 \div 18 \times 3 - 4 = 70$

On interchanging the symbols, the equation becomes –

$4 \div 5 - 18 + 3 \times 4 = 70$

Solving the L.H.S. of the equation –

$= 0.8 - 18 + 3 \times 4$

$= 0.8 - 18 + 12$

$= 12.8 - 18$

$= -5.2 \neq 70$

Fourth option: $4 \div 5 + 9 - 3 \div 4 = 81$

On interchanging the symbols, the equation becomes –

$4 - 5 \times 9 \div 3 - 4 = 81$

Solving the L.H.S. of the equation –

= 4 – 5 × 3 – 4
= 4 – 15 – 4
= –15 ≠ 81

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

Q. 58 **Directions:** If A denotes divided by, C denotes subtracted from, D denotes added to and B denotes multiplied by, 15 A 3 D 24 C 12 B 2 = ?

Option 1:
5

Option 2:
9

Option 3:
3

Option 4:
7

Correct Answer:
5

Solution:

Given:
15 A 3 D 24 C 12 B 2 = ?

Replacing the letters with mathematical signs, the equation becomes –
= 15 ÷ 3 + 24 – 12 × 2
= 5 + 24 – 12 × 2
= 5 + 24 – 24
= 5

The value of the equation is 5. Hence, the **first option** is correct.

Q. 59 **Directions:** If 6 A 33 B 11 = 18 and 4 A 18 B 9 = 8, then 3 B 35 A 5 = ?

Option 1:
12

Option 2:
25

Option 3:
21

Option 4:
18

Correct Answer:
21

Solution:
Given:
6 A 33 B 11 = 18; 4 A 18 B 9 = 8

Here, 6 × (33 ÷ 11) = 6 × 3 = 18
4 × (18 ÷ 9) = 4 × 2 = 8
Similarly, for 3 B 35 A 5→3 × (35 ÷ 5) = 3 × 7 = 21

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

Q. 60 **Directions:** If B denotes multiplication, C denotes subtraction, A denotes addition and D denotes division, which of the following equations is true?

Option 1:
24 D 12 B 3 A 12 = 18

Option 2:
36 D 6 B 3 A 2 = 74

Option 3:
42 A 7 B 2 D 2 = 35

Option 4:
56 D 14 B 2 C 4 = 12

Correct Answer:

24 D 12 B 3 A 12 = 18

Solution:

Let's check the options –

First option: 24 D 12 B 3 A 12 = 18

⇒ 24 ÷ 12 × 3 + 12 = 18

Solving the L.H.S. of the equation –

= 24 ÷ 12 × 3 + 12

= 2 × 3 + 12

= 6 + 12 = 18

= 18

Second option: 36 D 6 B 3 A 2 = 74

⇒ 36 ÷ 6 × 3 + 2 = 74

Solving the L.H.S. of the equation –

= 36 ÷ 6 × 3 + 2

= 6 × 3 + 2

= 18 + 2

= 20 ≠ 74

Third option: 42 A 7 B 2 D 2 = 35

⇒ 42 + 7 × 2 ÷ 2 = 35

Solving the L.H.S. of the equation –

= 42 + 7 × 2 ÷ 2

= 42 + 7 × 1

= 42 + 7

= 49 ≠ 35

Fourth option: 56 D 14 B 2 C 4 = 12

⇒ 56 ÷ 14 × 2 – 4 = 12

Solving the L.H.S. of the equation –

= 56 ÷ 14 × 2 – 4
= 4 × 2 – 4
= 8 – 4
= 4 ≠ 12

Only the first option satisfies the equation. Hence, the **first option** is correct.

Q. 61 **Directions:** If P denotes multiplication, Q denotes subtraction, S denotes addition and R denotes division, which of the following equations must be true?

Option 1:
7 S 56 P 2 R 28 = 11

Option 2:
36 R 6 P 2 S 4 = 19

Option 3:
64 R 8 P 3 S 6 = 72

Option 4:
36 R 9 S 4 P 2 = 14

Correct Answer:
7 S 56 P 2 R 28 = 11

Solution:

Let's check the options –

First option: 7 S 56 P 2 R 28 = 11

⇒ 7 + 56 × 2 ÷ 28 = 11

Solving the L.H.S. of the equation –

= 7 + 56 × 2 ÷ 28

= 7 + 4

= 11

Second option: 36 R 6 P 2 S 4 = 19

⇒ 36 ÷ 6 × 2 + 4 = 19

Solving the L.H.S. of the equation –

= 36 ÷ 6 × 2 + 4

= 12 + 4

= 16 ≠ 19

Third option: 64 R 8 P 3 S 6 = 72

⇒ 64 ÷ 8 × 3 + 6 = 72

Solving the L.H.S. of the equation –

= 64 ÷ 8 × 3 + 6

= 24 + 6

= 30 ≠ 72

Fourth option: 36 R 9 S 4 P 2 = 14

⇒ 36 ÷ 9 + 4 × 2 = 14

Solving the L.H.S. of the equation –

= 36 ÷ 9 + 4 × 2

= 4 + 8

= 12 ≠ 14

Only the first option satisfies the equation. Hence, the **first option** is correct.

Q. 62 **Directions:** If 7^2 A 7 B 9 = 16, and 5^2 A 5 B 7 = 12, then 9^2 A 3 B 8 = ?

Option 1:
17

Option 2:
92

Option 3:
86

Option 4:
35

Correct Answer:
35

Solution:
Given:
7^2 A 7 B 9 = 16; 5^2 A 5 B 7 = 12

7^2 A 7 B 9 = 16
= $((7)^2 \div 7) + 9 = (49 \div 7) + 9 = 7 + 9 = 16$
5^2 A 5 B 7 = 12

$= ((5)^2 \div 5) + 7 = (25 \div 5) + 7 = 5 + 7 = 12$

Similarly, for 9^2 A 3 B 8 –

$= ((9)^2 \div 3) + 8 = (81 \div 3) + 8 = 27 + 8 = 35$

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

Q. 63 **Directions:** If θ denotes added to, δ denotes subtracted from, β denotes divided by, and α denotes multiplied by, then 5 β 1 δ 9 α 7 θ 142 = ?

Option 1:
114

Option 2:
98

Option 3:
84

Option 4:
125

Correct Answer:
84

Solution:
Given:
5 β 1 δ 9 α 7 θ 142 = ?

Replacing the symbols with mathematical signs, we get –
= 5 ÷ 1 – 9 × 7 + 142
= 5 – 9 × 7 + 142
= 5 – 63 + 142
= 147 – 63
= 84

The answer is 84. Hence, the **third option** is correct.

Q. 64 **Directions:** If 4 * 9 % 2 = 47 and 9 * 0 % 6 = 84, then 5 * 3 % 7 = ?

Option 1:
38

Option 2:
51

Option 3:
42

Option 4:
46

Correct Answer:
46

Solution:
Given:
4 * 9 % 2 = 47 , 9 * 0 % 6 = 84

Let's deduce the pattern from the solved equations –
4 * 9 % 2 = 47→49 – 2 = 47
And, 9 * 0 % 6 = 84→90 – 6 = 84
Similarly, 5 * 3 % 7→53 – 7 = 46

The required value is 46. Hence, the **fourth option** is correct.

Q. 65 **Directions:** If 1 / 4 / 3 = 254 and 3 / 6 / 8 = 479, then 5 / 2 / 7 = ?

Option 1:
416

Option 2:
461

Option 3:
368

Option 4:
638

Correct Answer:
638

Solution:
Given:
1 / 4 / 3 = 254; 3 / 6 / 8 = 479

1 / 4 / 3→1 + 1 = 2; 4 + 1 = 5; 3 + 1 = 4→254
3 / 6 / 8→3 + 1 = 4; 6 + 1 = 7; 8 + 1 = 9→479
Similarly, 5 / 2 / 7→5 + 1 = 6; 2 + 1 = 3; 7 + 1 = 8→638

The required number is 638. Hence, the **fourth option** is correct.

Q. 66 **Directions:** If 14 @ 8 = 91 and 18 @ 4 = 51, then 21 @ 9 = ?

Option 1:
160

Option 2:
155

Option 3:
151

Option 4:
168

Correct Answer:
168

Solution:
Given:
14 @ 8 = 91; 18 @ 4 = 51

From the solved equations –
14 @ 8 = 91→(14 × 8) – 21 = 112 – 21 = 91
18 @ 4 = 51→(18 × 4) – 21 = 72 – 21 = 51
Similarly, 21 @ 9→(21 × 9) – 21 = 189 – 21 = 168

The required value is 168. Hence, the **fourth option** is correct.

Q. 67 **Directions:** If 15 (196) 29 and 16 (100) 6, what is the value of A in 31 (A) 48?

Option 1:
361

Option 2:
256

Option 3:
324

Option 4:
289

Correct Answer:
289

Solution:
Given:
15 (196) 29; 16 (100) 6

15 (196) 29→29 –15 = 14; $(14)^2$ = 196
16 (100) 6→16 – 6 = 10; $(10)^2$ = 100
Similarly, 31 (A) 48→48 – 31 = 17; $(17)^2$ = 289

The value of A is 289. Hence, the **fourth option** is correct.

Q. 68 **Directions:** Some equations are solved based on a certain system. Find out the correct answer for the unsolved equation on that basis.
9 × 6 × 2 = 269, 8 × 6 × 5 = 568, 5 × 4 × 1 = ?

Option 1:
145

Option 2:
415

Option 3:
201

Option 4:
451

Correct Answer:
145

Solution:
Given:
9 × 6 × 2 = 269; 8 × 6 × 5 = 568

Reverse the order of the digits in the equation.
9 × 6 × 2 = 269
8 × 6 × 5 = 568
Similarly, 5 × 4 × 1 = 145

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

Q. 69 **Directions:** Some equations are solved based on a certain system. Find out the correct answer for the unsolved equation on that basis.
If 12 × 9 = 810 and 15 × 9 = 513 then 13 × 8 = ?

Option 1:
104

Option 2:
410

Option 3:
401

Option 4:
411

Correct Answer:
410

Solution:
Given:
12 × 9 = 810; 15 × 9 = 513

Multiply the numbers and shuffle the digits. The first digit moves to the second place, the second digit moves to the third place, and the third digit moves to the first place.
12 × 9 = 108→810
15 × 9 = 135→513
Similarly, for 13 × 8; 13 × 8 = 104→410

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

Q. 70 **Directions:** If P denotes ÷, Q denotes ×, R denotes + and S denotes –, then 18 Q 12 P 4 R 5 S 6 = ?

Option 1:
34

Option 2:
53

Option 3:
36

Option 4:
65

Correct Answer:
53

Solution:
Given:
18 Q 12 P 4 R 5 S 6 = ?

On replacing the letters with the mathematical signs, the equation becomes –
= 18 × 12 ÷ 4 + 5 – 6
= 18 × 3 + 5 – 6
= 54 + 5 – 6
= 59 – 6
= 53

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

Q. 71 **Directions:** If J means +, K means –, T means ×, and U means ÷, then, 18 T 3 U 27 J 2 = ?

Option 1:
6

Option 2:
2

Option 3:
4

Option 4:
3

Correct Answer:
4

Solution:
Given:
18 T 3 U 27 J 2 = ?

On replacing the letters with the mathematical signs, the equation becomes –
= 18 × 3 ÷ 27 + 2
= 2 + 2
= 4

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

Q. 72 **Directions:** If 8 × 16 × 9 = 8169 and 9 × 23 × 4 = 9234, then 4 × 10 × 11 = ?

Option 1:
11014

Option 2:
41011

Option 3:
14610

Option 4:
10114

Correct Answer:
41011

Solution:
Given:
8 × 16 × 9 = 8169; 9 × 23 × 4 = 9234

Remove the multiplication sign and combine the numbers on the L.H.S. to form a single number as the resultant.
Like, 8 × 16 × 9 = 8169
9 × 23 × 4 = 9234
Similarly, 4 × 10 × 11 = 41011

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

Q. 73 **Directions:** If 4 @ 9 # 3 = –2, and 11 # 2 @ 6 = 7, then 14 @ 3 # 7 = ?

Option 1:
16

Option 2:
18

Option 3:
4

Option 4:
10

Correct Answer:
18

Solution:
Given:
4 @ 9 # 3 = –2; 11 # 2 @ 6 = 7

To solve the given equation, replace all occurrences of @ with – and # with +, and then solve the resulting equation.
Like, 4 @ 9 # 3 = – 2; 4 – 9 + 3 = –2

11 # 2 @ 6 = 7; 11 + 2 – 6 = 7
Similarly, for 14 @ 3 # 7; 14 – 3 + 7 = 18

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

Q. 74 **Directions:** By interchanging which two digits the equation will be correct?
43 ÷ 2 × 26 – 2 = 527

Option 1:
6 and 2

Option 2:
2 and 3

Option 3:
3 and 6

Option 4:
7 and 4

Correct Answer:
3 and 6

Solution:
Given:
43 ÷ 2 × 26 – 2 = 527

Let's check the options –

First option: 6 and 2

Since there are more than one 2's present in the equation, it is not clear which 2 needs to be interchanged. So, this option is incorrect.

Second option: 2 and 3

Since there are more than one 2's present in the equation, it is not clear which 2 needs to be interchanged. So, this option is incorrect.

Third option: 3 and 6

$\Rightarrow 46 \div 2 \times 23 - 2 = 527$

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

$= 46 \div 2 \times 23 - 2$

$= 23 \times 23 - 2$

$= 527$

Fourth option: 7 and 4

$\Rightarrow 73 \div 2 \times 26 - 2 = 524$

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

$= 73 \div 2 \times 26 - 2$

$= 36.5 \times 26 - 2$

$= 949 - 2 = 947 \neq 524$

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

Q. 75 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + means ×, – means +, × means ÷, and ÷ means –, then 12 × 2 + 6 – 7 ÷ 5 = ?

Option 1:
38

Option 2:
39

Option 3:
40

Option 4:
37

Correct Answer:
38

Solution:
Given:
12 × 2 + 6 – 7 ÷ 5 = ?

After replacing the symbols as per the direction, the equation becomes –

= 12 ÷ 2 × 6 + 7 – 5

= 6 × 6 + 7 – 5

= 36 + 7 – 5

= 36 + 2

= 38

So, the value of the equation is 38. Hence, the **first option** is correct.

Q. 76 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols.

If + means ×, – means ÷, × means –, and ÷ means + then find the value of the given equation.

9 + 8 ÷ 8 – 4 × 6 = ?

Option 1:

68

Option 2:

36

Option 3:

65

Option 4:
11

Correct Answer:
68

Solution:
Given:
9 + 8 ÷ 8 – 4 × 6 = ?

After replacing the symbols, the equation becomes –
= 9 × 8 + 8 ÷ 4 – 6
= 9 × 8 + 2 – 6
= 72 + 2 – 6
= 68

So, the value of the equation is 68. Hence, the **first option** is correct.

Q. 77 **Directions:** 66 @ 17 @ 53 = 641551, and 17 @ 9 @ 99 = 15797, then 41 @ 11 @ 81 = ?

Option 1:
79993

Option 2:
37999

Option 3:
39979

Option 4:
39997

Correct Answer:
39979

Solution:
Given:
66 @ 17 @ 53 = 641551; 17 @ 9 @ 99 = 15797

The pattern followed here is –
66 @ 17 @ 53→(66 – 2) = 64; (17 – 2) = 15; (53 – 2) = 51→641551
17 @ 9 @ 99→(17 – 2) = 15; (9 – 2) = 7; (99 – 2) = 97→15797
Similarly, follow the same pattern for 41 @ 11 @ 81 –
(41 – 2) = 39; (11 – 2) = 9; (81 – 2) = 79→39979

So, 39979 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 78 **Directions:** If 13 L 4 A 7 = 41 and 14 A 3 L 12 = 54, then 12 L 3 A 9 = ?

Option 1:
84

Option 2:
39

Option 3:
42

Option 4:
56

Correct Answer:
39

Solution:
Given:
13 L 4 A 7 = 41, and 14 A 3 L 12 = 54

Replace A and L with × and + respectively in the given equations to get the answer.
Like, 13 L 4 A 7 = 41; 13 + 4 × 7 = 13 + 28 = 41
And, 14 A 3 L 12 = 54; 14 × 3 + 12 = 42 + 12 = 54
Similarly, 12 L 3 A 9 = 12 + 3 × 9 = 12 + 27 = 39

So, 39 is the required answer to the given equation.
Hence, the **second option** is correct.

Q. 79 **Directions:** If P means +, Q means –, R means ÷, and S means ×, then which of the following equations is correct?

Option 1:
14 R 7 S 6 P 4 Q 3 = 11

Option 2:
9 S 8 P 6 R 4 S 8 = 80

Option 3:
3 S 6 P 2 Q 3 R 6 = 17.5

Option 4:
11 R 12 S 48 P 10 Q 6 = 48

Correct Answer:
11 R 12 S 48 P 10 Q 6 = 48

Solution:
Given:
P means +, Q means –, R means ÷, and S means ×

Let's check the options –
First option: 14 R 7 S 6 P 4 Q 3 = 11
On replacing the letters with the mathematical signs, the equation becomes –
⇒ 14 ÷ 7 × 6 + 4 – 3 = 11
Solving the L.H.S. of the equation –
= 14 ÷ 7 × 6 + 4 – 3
= 2 × 6 + 4 – 3
= 12 + 4 – 3
= 13 ≠ 11

Second option: 9 S 8 P 6 R 4 S 8 = 80

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

⇒ 9 × 8 + 6 ÷ 4 × 8 = 80

Solving the L.H.S. of the equation –

= 9 × 8 + 6 ÷ 4 × 8

= 9 × 8 + 1.5 × 8

= 72 + 12

= 84 ≠ 80

Third option: 3 S 6 P 2 Q 3 R 6 = 17.5

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

⇒ 3 × 6 + 2 – 3 ÷ 6 = 17.5

Solving the L.H.S. of the equation –

= 3 × 6 + 2 – 3 ÷ 6

= 3 × 6 + 2 – 0.5

= 18 + 2 – 0.5

= 20 – 0.5

= 19.5 ≠ 17.5

Fourth option: 11 R 12 S 48 P 10 Q 6 = 48

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

⇒ 11 ÷ 12 × 48 + 10 – 6 = 48

Solving the L.H.S. of the equation –

= 11 ÷ 12 × 48 + 10 – 6

= 44 + 10 – 6

= 54 – 6

= 48

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

Q. 80 **Directions:** If P means +, Q means –, R means ÷, and S means ×, then, 46 S 14 R 2 P 11 Q 6 = ?

Option 1:
319

Option 2:
327

Option 3:
–217

Option 4:
317

Correct Answer:
327

Solution:
Given:
46 S 14 R 2 P 11 Q 6 = ?

Replacing the letters with the assigned mathematical symbols in the equation, the equation becomes –
= 46 × 14 ÷ 2 + 11 – 6

= 46 × 7 + 11 – 6
= 322 + 11 – 6
= 333 – 6
= 327

So, 327 is the answer to the given equation. Hence, the **second option** is correct.

Q. 81 **Directions:** If 19 + 4 # 5 = 39 and 21 # 5 + 6 = 111, then 11 + 15 # 5 = ?

Option 1:
76

Option 2:
70

Option 3:
62

Option 4:
86

Correct Answer:
86

Solution:

Given:
19 + 4 # 5 = 39, and 21 # 5 + 6 = 111

Here, replace # with × in the given equations to get the answer.
Like, 19 + 4 # 5 = 39→19 + 4 × 5 = 19 + 20 = 39
And, 21 # 5 + 6 = 111→21 × 5 + 6 = 105 + 6 = 111
Similarly, 11 + 15 # 5 = 11 + 15 × 5 = 11 + 75 = 86

So, 86 is the answer to the given equation. Hence, the **fourth option** is correct.

Q. 82 **Directions:** If 14 # 3 @ 4 = 46 and 19 # 4 @ 3 = 79, then 21 # 4 @ 1 = ?

Option 1:
25

Option 2:
92

Option 3:
85

Option 4:
97

Correct Answer:
85

Solution:
Given:
14 # 3 @ 4 = 46, and 19 # 4 @ 3 = 79

Here, replace # and @ with × and + respectively in the given equations to get the answer.
Like, 14 # 3 @ 4 = 46→14 × 3 + 4 = 42 + 4 = 46
And, 19 # 4 @ 3 = 79 →19 × 4 + 3 = 76 + 3 = 79
Similarly, 21 # 4 @ 1 = 21 × 4 + 1 = 84 + 1 = 85

So, 85 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 83 **Directions:** By interchanging which two signs will the equation be correct?
16 + 31 – 3 × 93 ÷ 11 = 966

Option 1:
+ and –

Option 2:
– and ÷

Option 3:
÷ and ×

Option 4:
× and +

Correct Answer:
– and ÷

Solution:
Given:
16 + 31 – 3 × 93 ÷ 11 = 966

Let's check the options –
First option: + and –
= 16 – 31 + 3 × 93 ÷ 11
= 16 – 31 + 3 × 8.45
= 16 – 31 + 25.35
= 41.35 – 31
= 10.35 ≠ 966
Second option: – and ÷
= 16 + 31 ÷ 3 × 93 – 11
= 16 + 961 – 11
= 977 – 11
= 966
Third option: ÷ and ×
= 16 + 31 – 3 ÷ 93 × 11
= 16 + 31 – 0.03 × 11
= 16 + 31 – 0.33

= 47 – 0.33

= 46.67 ≠ 966

Fourth option: × and +

= 16 × 31 – 3 + 93 ÷ 11

= 16 × 31 – 3 + 8.45

= 496 – 3 + 8.45

= 504.45 – 3

= 501.45 ≠ 966

So, only the second option satisfies the R.H.S. of the given equation.

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

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

19 + 36 × 12 ÷ 4 – 26 = 5

Option 1:

+ and –

Option 2:

÷ and –

Option 3:

× and ÷

Option 4:
+ and ×

Correct Answer:
× and ÷

Solution:
Given:
19 + 36 × 12 ÷ 4 – 26 = 5

Interchange the signs in the given options.
Let's check the options –
First option: + and –
= 19 – 36 × 12 ÷ 4 + 26
= 19 – 36 × 3 + 26
= 19 – 108 + 26
= 45 – 108
= –63 ≠ 5
Second option: ÷ and –
= 19 + 36 × 12 – 4 ÷ 26
= 19 + 36 × 12 – 0.15
= 19 + 432 – 0.15
= 451 – 0.15
= 450.85 ≠ 5
Third option: × and ÷
= 19 + 36 ÷ 12 × 4 – 26
= 19 + 3 × 4 – 26
= 19 + 12 – 26
= 31 – 26

= 5

Fourth option: + and ×

= 19 × 36 + 12 ÷ 4 – 26

= 19 × 36 + 3 – 26

= 684 + 3 – 26

= 687 – 26

= 661 ≠ 5

So, only the third option satisfies the R.H.S. of the given equation.

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

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

459 + 17 × 12 ÷ 72 – 47 = 349

Option 1:

÷ and +

Option 2:

÷ and –

Option 3:

+ and ×

Option 4:

– and +

Correct Answer:

÷ and +

Solution:

Given:

459 + 17 × 12 ÷ 72 – 47 = 349

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

First option: ÷ and +

⇒ 459 ÷ 17 × 12 + 72– 47 = 349

= 27 × 12 + 72 – 47

= 324 + 72 – 47

= 349

Second option: ÷ and –

⇒ 459 + 17 × 12 – 72 ÷ 47 = 349

= 459 + 17 × 12 – 1.53

= 459 + 204 – 1.53

= 661.47 ≠ 349

Third option: + and ×

⇒ 459 × 17 + 12 ÷ 72 – 47 = 349

= 459 × 17 + 0.167 – 47

= 7803 + 0.167 – 47

= 7756.167 ≠ 349

Fourth option: – and +

⇒ 459 – 17 × 12 ÷ 72 + 47 = 349

= 459 – 17 × 0.167 + 47

= 459 – 2.839 + 47

= 503.161 ≠ 349

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

Q. 86 **Directions:** Which two numbers and two signs should be interchanged in the following equation to make it correct?
7 × 14 ÷ 6 + 12 + 6 = 30

Option 1:
7 and 6, × and ÷

Option 2:
7 and 14, × and ÷

Option 3:
7 and 6, ÷ and +

Option 4:
6 and 14, × and +

Correct Answer:
7 and 14, × and ÷

Solution:
Given:
7 × 14 ÷ 6 + 12 + 6 = 30

Let's check the options –

First option: 7 and 6, × and ÷

Since there are two 6s in the equation, it is not clear which 6 needs to be interchanged. So, this option is incorrect.

Second option: 7 and 14, × and ÷

On interchanging the numbers and symbols, the equation becomes –

14 ÷ 7 × 6 + 12 + 6 = 30

Solving the L.H.S. of the equation –

= 2 × 6 + 12 + 6

= 12 + 12 + 6

= 30

Third option: 7 and 6, ÷ and +

Since there are two 6s in the equation, it is not clear which 6 needs to be interchanged. So, this option is incorrect.

Fourth option: 6 and 14, × and +

Since there are two 6s in the equation, it is not clear which 6 needs to be interchanged. So, this option is incorrect.

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

Q. 87 **Directions:** Which two signs and numbers need to be interchanged to make the following equation correct?

24 – (9 ÷ 12) + (84 × 4) + 28 = 23

Option 1:
24 and 28, – and ÷

Option 2:
24 and 28, × and ÷

Option 3:
9 and 4, ÷ and ×

Option 4:
12 and 4, ÷ and ×

Correct Answer:
12 and 4, ÷ and ×

Solution:
Given:
24 – (9 ÷ 12) + (84 × 4) + 28 = 23

Interchange the given signs and numbers in the options one by one with the original signs and numbers in the given equation.

Let's check the options –
First option: 24 and 28, – and ÷
= 28 ÷ (9 – 12) + (84 × 4) + 24
= 28 ÷ (–3) + (336) + 24
= –9.3 + 336 + 24
= 350.7 ≠ 23
Second option: 24 and 28, × and ÷

= 28 – (9 × 12) + (84 ÷ 4) + 24
= 28 – (108) + (21) + 24
= –35 ≠ 23

Third option: 9 and 4, ÷ and ×
= 24 – (4 × 12) + (84 ÷ 9) + 28
= 24 – (48) + (9.3) + 28
= 13.3 ≠ 23

Fourth option: 12 and 4, ÷ and ×
= 24 – (9 × 4) + (84 ÷ 12) + 28
= 24 – (36) + (7) + 28
= 23

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

Q. 88 **Directions:** If + means subtraction, – means multiplication, ÷ means addition, and × means division, then what is the value of the following expression?
14 – 19 + 240 × 16 ÷ 61

Option 1:
284

Option 2:
312

Option 3:
274

Option 4:
329

Correct Answer:
312

Solution:
Given:
14 – 19 + 240 × 16 ÷ 61 = ?

After replacing the symbols as directed, the equation becomes –
= 14 × 19 – 240 ÷ 16 + 61
= 14 × 19 – 15 + 61
= 266 – 15 + 61
= 327 – 15
= 312

So, 312 is the answer to the given equation. Hence, the **second option** is correct.

Q. 89 **Directions:** Which two numbers and two signs should be interchanged in the following equation to make it correct?
3 – 17 + 3 + 16 × 8 = 60

Option 1:
17 and 8, – and ×

Option 2:
3 and 17, – and ×

Option 3:
3 and 16, – and ×

Option 4:
17 and 16, – and ×

Correct Answer:
17 and 16, – and ×

Solution:
Given:
3 – 17 + 3 + 16 × 8 = 60

Let's check the options –
First option: 17 and 8, – and ×
3 × 8 + 3 + 16 – 17 = 60
On solving the L.H.S. of the equation –
= 3 × 8 + 3 + 16 – 17
= 24 + 3 + 16 – 17
= 43 – 17
= 26 ≠ 60
Second option: 3 and 17, – and ×
17 × 3 + 17 + 16 – 8 = 60

On solving the L.H.S. of the equation –
= 17 × 3 + 17 + 16 – 8
= 51 + 17 + 16 – 8
= 84 – 8
= 76 ≠ 60
Third option: 3 and 16, – and ×
16 × 17 + 16 + 3 – 8 = 60
On solving the L.H.S. of the equation –
= 16 × 17 + 16 + 3 – 8
= 272 + 16 + 3 – 8
= 291 – 8
= 283 ≠ 60
Fourth option: 17 and 16, – and ×
3 × 16 + 3 + 17 – 8 = 60
On solving the L.H.S. of the equation –
= 3 × 16 + 3 + 17 – 8
= 48 + 3 + 17 – 8
= 68 – 8
= 60

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

Q. 90 **Directions:** Which two signs and two numbers should be interchanged to make the following equation correct?
784 ÷ 6 × 9 – 30 + 14 = 528

Option 1:
14 and 6, + and –

Option 2:
784 and 30, + and x

Option 3:
784 and 6, × and –

Option 4:
9 and 6, + and ÷

Correct Answer:
14 and 6, + and –

Solution:
Given:
784 ÷ 6 × 9 – 30 + 14 = 528

Let's check the options –
First option: 14 and 6, + and –
On interchanging the numbers and signs, the equation becomes –
784 ÷ 14 × 9 + 30 – 6 = 528
Solving the L.H.S. of the equation –
= 56 × 9 + 30 – 6
= 504 + 30 – 6
= 534 – 6
= 528
Second option: 784 and 30, + and ×

On interchanging the numbers and signs, the equation becomes –

30 ÷ 6 + 9 – 784 × 14 = 528

Solving the L.H.S. of the equation –

= 5 + 9 – 784 × 14

= 5 + 9 – 10976

= 14 – 10976

= –10962 ≠ 528

Third option: 784 and 6, × and –

On interchanging the numbers and signs, the equation becomes –

6 ÷ 784 – 9 × 30 + 14 = 528

Solving the L.H.S. of the equation –

= 0.0077 – 9 × 30 + 14

= 0.0077 – 270 + 14

= 14.0077 – 270

= –255.99 ≠ 528

Fourth option: 9 and 6, + and ÷

On interchanging the numbers and signs, the equation becomes –

784 + 9 × 6 – 30 ÷ 14 = 528

Solving the L.H.S. of the equation –

= 784 + 9 × 6 – 2.14

= 784 + 54 – 2.14

= 838 – 2.14

= 835.86 ≠ 528

So, from the above, only the first option satisfies the given equation.

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

Q. 91 **Directions:** Which two signs should be interchanged to make the given equation correct?
3 × 12 – 6 ÷ 2 + 12 = 16

Option 1:
÷ and +

Option 2:
× and ÷

Option 3:
– and ÷

Option 4:
– and +

Correct Answer:
– and ÷

Solution:
Given:
3 × 12 – 6 ÷ 2 + 12 = 16

Let's check the options –
First option: ÷ and +
On interchanging the signs, the equation becomes –
3 × 12 – 6 + 2 ÷ 12 = 16

Solving the L.H.S. of the equation –

= 3 × 12 – 6 + 0.167

= 36 – 6 + 0.167

= 30.16 ≠ 16

Second option: × and ÷

On interchanging the signs, the equation becomes –

3 ÷ 12 – 6 × 2 + 12 = 16

Solving the L.H.S. of the equation –

= 0.25 – 6 × 2 + 12

= 0.25 – 12 + 12

= 0.25 ≠ 16

Third option: – and ÷

On interchanging the signs, the equation becomes –

3 × 12 ÷ 6 – 2 + 12 = 16

Solving the L.H.S. of the equation –

= 3 × 2 – 2 + 12

= 6 – 2 + 12

= 16

Fourth option: – and +

On interchanging the signs, the equation becomes –

3 × 12 + 6 ÷ 2 – 12 = 16

Solving the L.H.S. of the equation –

= 3 × 12 + 3 – 12

= 36 + 3 – 12

= 39 – 12

= 27 ≠ 16

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

Q. 92 **Directions:** Which two signs and two numbers should be interchanged to make the following equation correct?
840 ÷ 38 – 7 + 10 × 12 = 462

Option 1:
12 and 10, ÷ and +

Option 2:
12 and 38, × and –

Option 3:
12 and 7, + and ×

Option 4:
840 and 10, + and –

Correct Answer:
12 and 38, × and –

Solution:
Given:
840 ÷ 38 – 7 + 10 × 12 = 462

Let's check the options –
First option: 12 and 10, ÷ and +
On interchanging the numbers and signs, the equation becomes –

840 + 38 – 7 ÷ 12 × 10 = 462

Solving the L.H.S. of the equation –

= 840 + 38 – 0.583 × 10

= 840 + 38 – 5.83

= 872.17 ≠ 462

Second option: 12 and 38, × and –

On interchanging the numbers and signs, the equation becomes –

840 ÷ 12 × 7 + 10 – 38 = 462

Solving the L.H.S. of the equation –

= 70 × 7 + 10 – 38

= 490 + 10 – 38

= 500 – 38

= 462

Third option: 12 and 7, + and ×

On interchanging the numbers and signs, the equation becomes –

840 ÷ 38 – 12 × 10 + 7 = 462

Solving the L.H.S. of the equation –

= 22.10 – 12 × 10 + 7

= 22.10 – 120 + 7

= –90.9 ≠ 462

Fourth option: 840 and 10, + and –

On interchanging the numbers and signs, the equation becomes –

10 ÷ 38 + 7 – 840 × 12 = 462

Solving the L.H.S. of the equation –

= 0.263 + 7 – 840 × 12

= 0.263 + 7 – 10080

= –10072.737 ≠ 462

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

Q. 93 **Directions:** Some equations have been solved based on a certain pattern. Find the correct answer for the unsolved equation on that basis.
9 * 8 = 63, 7 * 8 = 49, 5 * 6 = 25, 11 * 7 = ?

Option 1:
77

Option 2:
70

Option 3:
66

Option 4:
121

Correct Answer:
66

Solution:
Given:
9 * 8 = 63, 7 * 8 = 49, 5 * 6 = 25

Like, 9 * 8 = 63→9 × 8 = 72; 72 – 9 = 63
And, 7 * 8 = 56→7 × 8 = 56; 56 – 7 = 49
Similarly, 11 * 7→11 × 7 = 77; 77 – 11 = 66

So, 66 is the answer. Hence, the **third option** is correct.

Q. 94 **Directions:** Which of the following interchange of numbers would make the given equation correct?
5 × 15 + 3 + 20 – 9 = 101

Option 1:
5, 20

Option 2:
15, 20

Option 3:
3, 9

Option 4:
101, 20

Correct Answer:
3, 9

Solution:
Given:
5 × 15 + 3 + 20 – 9 = 101

Replace the original numbers given in the equation with the assigned numbers in the options one by one –

First option: 5, 20

$20 \times 15 + 3 + 5 - 9 = 101$

$= 300 + 3 + 5 - 9$

$299 \neq 101$

Second option: 15, 20

$5 \times 20 + 3 + 15 - 9 = 101$

$= 100 + 3 + 15 - 9$

$109 \neq 101$

Third option: 3, 9

$5 \times 15 + 9 + 20 - 3 = 101$

$= 75 + 9 + 20 - 3$

$101 = 101$

Fourth option: 101, 20

$5 \times 15 + 3 + 101 - 9 = 20$

$= 75 + 3 + 101 - 9$

$170 \neq 20$

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

Q. 95 **Directions:** Which two signs should be interchanged to make the given equation correct?

$13 \times 6 + 24 \div 6 - 17 = 91$

Option 1:
÷ and +

Option 2:
+ and ×

Option 3:
÷ and ×

Option 4:
+ and –

Correct Answer:
+ and –

Solution:
Given:
13 × 6 + 24 ÷ 6 – 17 = 91

Let's check the options –
First option: ÷ and +
⇒ 13 × 6 ÷ 24 + 6 – 17 = 91
= 13 × 6 ÷ 24 + 6 – 17
= 13 × 0.25 – 11
= – 7.75 ≠ 91
Second option: + and ×
⇒ 13 × 6 + 24 ÷ 6 – 17 = 91
= 13 + 6 × 24 ÷ 6 – 17
= 13 + 24 – 17

= 20 ≠ 91

Third option: ÷ and ×

⇒ 13 × 6 + 24 ÷ 6 – 17 = 91

= 13 ÷ 6 + 24 × 6 – 17

= 2.17 + 144 – 17

= 129.17 ≠ 91

Fourth option: + and –

⇒ 13 × 6 + 24 ÷ 6 – 17 = 91

= 13 × 6 – 24 ÷ 6 + 17

= 78 – 4 + 17

= 91

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

Q. 96 **Directions:** Which two numbers and two signs should be interchanged in the following equation to make it correct?

4 + 2 ÷ 7 + 8 × 9 = 25

Option 1:

4 and 9, + and ×

Option 2:

4 and 7, ÷ and ×

Option 3:
4 and 9, ÷ and ×

Option 4:
4 and 7, + and ×

Correct Answer:
4 and 9, ÷ and ×

Solution:
Given:
4 + 2 ÷ 7 + 8 × 9 = 25

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 options –
First option: 4 and 9, + and ×
9 × 2 ÷ 7 × 8 + 4 = 25
= 9 × 2 ÷ 7 × 8 + 4
= 9 × 0.28 + 4
= 2.52 + 4
= 6.52 ≠ 25
Second option: 4 and 7, ÷ and ×
7 + 2 × 4 + 8 ÷ 9 = 25
= 7 + 2 × 4 + 8 ÷ 9
= 7 + 8 + 0.89
= 15 + 0.89
= 15.89 ≠ 25
Third option: 4 and 9, ÷ and ×
9 + 2 × 7 + 8 ÷ 4 = 25

= 9 + 2 × 7 + 8 ÷ 4
= 9 + 14 + 2
= 25

Fourth option: 4 and 7, + and ×
7 × 2 ÷ 4 × 8 + 9 = 25
7 × 2 ÷ 4 × 8 + 9
= 7 × 0.5 × 8 + 9
= 28 + 9
= 37 ≠ 25

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

Q. 97 **Directions:** Substitute the correct mathematical symbols in place of * in the following equation.
16 * 4 * 5 * 14 * 6

Option 1:
÷, –, =, ×

Option 2:
–, ×, +, =

Option 3:
÷, ×, =, +

Option 4:

÷, +, =, –

Correct Answer:

÷, ×, =, +

Solution:

Let's check the options –

First option: ÷, –, =, ×

Equation after replacing the signs ⇒ 16 ÷ 4 – 5 = 14 × 6

⇒ 4 – 5 = 14 × 6

= –1 ≠ 84 (L.H.S. ≠ R.H.S.)

Second option: –, ×, +, =

Equation after replacing the signs ⇒ 16 – 4 × 5 + 14 = 6

Solving the L.H.S. of the equation –

⇒ 16 – 4 × 5 + 14

= 16 – 20 + 14

= 30 – 20

= 10 (L.H.S. ≠ R.H.S.)

Third option: ÷, ×, =, +

Equation after replacing the signs ⇒ 16 ÷ 4 × 5 = 14 + 6

⇒ 4 × 5 = 20

= 20 (L.H.S. = R.H.S.)

Fourth option: ÷, +, =, –

Equation after replacing the signs ⇒ 16 ÷ 4 + 5 = 14 – 6

⇒ 16 ÷ 4 + 5 = 8

= 4 + 5 = 8

= 9 ≠ 8 (L.H.S. ≠ R.H.S.)

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

Q. 98 **Directions:** Substitute the arithmetical signs in the place of * in the following equation.
7 * 7 * 2 * 1 = 12

Option 1:
×, –, ÷

Option 2:
+, –, ×

Option 3:
×, –, +

Option 4:
+, ×, –

Correct Answer:
+, –, ×

Solution:
Let's check the option –
First option: ×, –, ÷
Equation after replacing the signs ⇒ 7 × 7 – 2 ÷ 1 = 12
Solving the L.H.S. of the equation –

= 7 × 7 – 2 ÷ 1

= 7 × 7 – 2

= 49 – 2

= 47 ≠ 12 (L.H.S. ≠ R.H.S.)

Second option: +, –, ×

Equation after replacing the signs ⇒ 7 + 7 – 2 × 1 = 12

Solving the L.H.S. of the equation –

= 7 + 7 – 2 × 1

= 7 + 7 – 2

= 12 (L.H.S. = R.H.S.)

Third option: ×, –, +

Equation after replacing the signs ⇒ 7 × 7 – 2 + 1 = 12

Solving the L.H.S. of the equation –

= 7 × 7 – 2 + 1

= 49 – 2 + 1

= 48 ≠ 12 (L.H.S. ≠ R.H.S.)

Fourth option: + × –

Equation after replacing the signs ⇒ 7 × 7 – 2 + 1 = 12

Solving the L.H.S. of the equation –

= 7 + 7 × 2 – 1

= 7 + 14 – 1

= 20 ≠ 12 (L.H.S. ≠ R.H.S.)

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

Q. 99 **Directions:** The interchange of signs and numbers would make the given equation correct.
6 + 2 – 3 = 16

Option 1:
+ and –, 2 and 3

Option 2:
× and +, 3 and 2

Option 3:
÷ and –, 3 and 2

Option 4:
× and –, 2 and 3

Correct Answer:
× and +, 3 and 2

Solution:
Given:
6 + 2 – 3 = 16

Replace the given symbols and numbers in the options one by one with the original symbols and numbers in the given equation.
First option: + and –, 2 and 3
⇒ 6 – 3 + 2 = 16

Solving the L.H.S. of the equation –
= 8 – 3
= 5 ≠ 16
Second option: × and +, 3 and 2
⇒ 6 × 3 – 2 = 16
Solving the L.H.S. of the equation –
= 18 – 2
= 16
Third option: ÷ and –, 3 and 2
⇒ 6 + 3 ÷ 2 = 16
Solving the L.H.S. of the equation –
= 6 + 1.5
= 7.5 ≠ 16
Fourth option: × and –, 2 and 3
⇒ 6 + 3 × 2 = 16
Solving the L.H.S. of the equation –
= 6 + 6
= 12 ≠ 16

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

Q. 100 **Directions:** In the following question, correct the equation by interchanging any two numbers.
5 + 3 ÷ 6 × 9 – 2 = 21

Option 1:
5 and 9

Option 2:
3 and 6

Option 3:
6 and 9

Option 4:
5 and 3

Correct Answer:
3 and 6

Solution:
Given:
5 + 3 ÷ 6 × 9 – 2 = 21

Interchange the numbers according to the given options.
Let's check each option –
First option: 5 and 9
= 9 + 3 ÷ 6 × 5 – 2
= 9 + 0.5 × 5 – 2
= 9 + 2.5 – 2
= 11.5 ≠ 21
Second option: 3 and 6;
= 5 + 6 ÷ 3 × 9 – 2
= 5 + 2 × 9 – 2

= 5 + 18 – 2

= 21 = R.H.S.

Third option: 6 and 9;

= 5 + 3 ÷ 9 × 6 – 2

= 5 + 2 – 2

= 5 ≠ 21

Fourth option: 5 and 3;

= 3 + 5 ÷ 6 × 9 – 2

= 3 + 7.5 – 2

= 8.5 ≠ 21

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

Q. 101 **Directions:** In the following question, correct the equation by interchanging the signs given in the options.

7 × 6 + 5 – 12 ÷ 3 = 41

Option 1:

+ and ÷

Option 2:

× and ÷

Option 3:

+ and –

Option 4:
× and –

Correct Answer:
+ and –

Solution:
Given:
7 × 6 + 5 – 12 ÷ 3 = 41

Interchange the given symbols in the options one by one with the original symbols in the given equation.
First option: + and ÷
= 7 × 6 ÷ 5 – 12 + 3
= 7 × 1.2 – 12 + 3
= 8.4 – 12 + 3
= –0.6 ≠ 41
Second option: × and ÷
= 7 ÷ 6 + 5 – 12 × 3
= 1.167 + 5 – 36
= –29.83 ≠ 41
Third option: + and –
= 7 × 6 – 5 + 12 ÷ 3
= 42 – 5 + 4
= 41 = R.H.S.
Fourth option: × and –
= 7 – 6 + 5 × 12 ÷ 3

= 7 – 6 + 5 × 4
= 7 – 6 + 20
= 21 ≠ 41

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

Q. 102 **Directions:** Select the correct combination of mathematical signs to replace signs and balance the following equation.
21 * 7 * 6 * 9

Option 1:
+, ÷, =

Option 2:
÷, +, =

Option 3:
=, +, ÷

Option 4:
÷, =, +

Correct Answer:
÷, +, =

Solution:

Given:

21 * 7 * 6 * 9

Let's check the options –

First option: +, ÷, =

⇒ 21 + 7 ÷ 6 = 9

Solving the L.H.S. of the equation –

= 21 + 7 ÷ 6

= 21 + 1.67

= 22.67 ≠ 9

Second option: ÷, +, =

⇒ 21 ÷ 7 + 6 = 9

Solving the L.H.S. of the equation –

= 21 ÷ 7 + 6

= 3 + 6

= 9 = R.H.S.

Third option: =, +, ÷

⇒ 21 = 7 + 6 ÷ 9

Solving the R.H.S. of the equation –

= 7 + 6 ÷ 9

= 7 + 0.67

= 7.67 ≠ 21

Fourth option: ÷, =, +

⇒ 21 ÷ 7 = 6 + 9

= 3 ≠ 15

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

Q. 103 **Directions:** Select the correct combination of mathematical signs to replace * signs and balance the following equation.
6 * 4 * 12 * 12

Option 1:
+, –, =

Option 2:
+, =, ÷

Option 3:
=, –, ÷

Option 4:
×, –, =

Correct Answer:
×, –, =

Solution:
Given:
6 * 4 * 12 * 12

Let's check the options –
First option: +, –, =
⇒ 6 + 4 – 12 = 12

Solving the L.H.S. of the equation –

= 6 + 4 – 12

= 10 – 12

= –2 ≠ 12

Second option: +, =, ÷

⇒ 6 + 4 = 12 ÷ 12

= 10 ≠ 1

Third option: =, –, ÷

⇒ 6 = 4 – 12 ÷ 12

Solving the R.H.S. of the equation –

= 4 – 12 ÷ 12

= 4 – 1

= 3 ≠ 6

Fourth option: ×, –, =

⇒ 6 × 4 – 12 = 12

Solving the L.H.S. of the equation –

= 6 × 4 – 12

= 24 – 12

= 12 (L.H.S. = R.H.S.)

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

Q. 104 **Directions:** Which two signs should be interchanged to make the given equation correct?

17 + 10 × 5 ÷ 9 + 18 = 53

Option 1:
+ and ÷

Option 2:
+ and ×

Option 3:
+ and –

Option 4:
× and ÷

Correct Answer:
× and ÷

Solution:
Given:
17 + 10 × 5 ÷ 9 + 18 = 53

Let's check the options –
First option: + and ÷
In the given equation, two + signs are present, and it's unclear which one should be interchanged. So, this option is incorrect.
Second option: + and ×
In the given equation, two + signs are present, and it's unclear which one should be interchanged. So, this option is incorrect.
Third option: + and –
In the given equation, two + signs are present, and there is no –

sign. So, this option is incorrect.

Fourth option: × and ÷

On interchanging the mathematical signs, we get –

= 17 + 10 ÷ 5 × 9 + 18

= 17 + 2 × 9 + 18

= 17 + 18 + 18

= 53

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

Q. 105 **Directions:** what is the value of the given expression If < means –; ! means ×; > means +; and @ means ÷, then what is the value of the following expression?

183 > 39 @ 13 ! 6 < 26

Option 1:

175

Option 2:

160

Option 3:

193

Option 4:

181

Correct Answer:
175

Solution:
Given:
< means –; ! means ×; > means +; and @ means ÷
183 > 39 @13 ! 6 < 26

After replacing symbols with mathematical signs the equation becomes —
⇒ 183 + 39 ÷ 13 × 6 – 26
= 183 + 3 × 6 – 26
= 183 + 18 – 26
= 175

So, after solving the equation the required answer is 175. Hence, the **first option** is correct.

Q. 106

Directions: In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If – means addition, + means subtraction, × means division, and ÷ means multiplication, then
7 – 10 × 5 ÷ 6 + 4 = ?

Option 1:
3

Option 2:
12

Option 3:
15

Option 4:
9

Correct Answer:
15

Solution:
Given:
– means addition, + means subtraction, × means division, and ÷ means multiplication.
7 – 10 × 5 ÷ 6 + 4 = ?

After replacing the symbols as per the information provided, the equation becomes –
= 7 + 10 ÷ 5 × 6 – 4
= 7 + 2 × 6 – 4
= 7 + 12 – 4
= 19 – 4
= 15

So, 15 is the answer to the given equation. Hence, the **third option** is correct.

Q. 107 **Directions:** If + means subtraction, – means multiplication, ÷ means addition, and × means division, then what is the value of the following expression?
26 – 13 + 144 × 18 ÷ 81

Option 1:
292

Option 2:
411

Option 3:
405

Option 4:
144

Correct Answer:
411

Solution:
Given:
+ means subtraction, – means multiplication, ÷ means addition, and × means division
26 – 13 + 144 × 18 ÷ 81

After replacing the symbols as directed by the question, the equation becomes –

= 26 × 13 – 144 ÷ 18 + 81

= 26 × 13 – 8 + 81

= 338 – 8 + 81

= 338 + 73

= 411

So, 411 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 108 **Directions:** Which two signs and two numbers should be interchanged in the following equation to make it correct?

15 ÷ 80 – 34 + 10 × 8 = 102

Option 1:

10, 80, ÷, –

Option 2:

15, 34, –, ×

Option 3:

34, 15, +, ÷

Option 4:

10, 34, ÷, ×

Correct Answer:
34, 15, +, ÷

Solution:
Given:
15 ÷ 80 – 34 + 10 × 8 = 102

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: 10, 80, ÷, –
The equation becomes ⇒ 15 – 10 ÷ 34 + 80 × 8 = 102
Solving the L.H.S. of the equation –
= 15 – 10 ÷ 34 + 80 × 8
= 15 – 0.29 + 640
= 654.71 ≠ 102
Second option: 15, 34, –, ×
The equation becomes ⇒ 34 ÷ 80 × 15 + 10 – 8 = 102
Solving the L.H.S. of the equation –
= 34 ÷ 80 × 15 + 10 – 8
= 0.425 × 15 + 10 – 8
= 6.375 + 10 – 8
= 8.375 ≠ 102
Third option: 34, 15, +, ÷
The equation becomes ⇒ 34 + 80 – 15 ÷ 10 × 8 = 102
Solving the L.H.S. of the equation –
= 34 + 80 – 15 ÷ 10 × 8
= 34 + 80 – 1.5 × 8
= 34 + 80 – 12
= 102

Fourth option: 10, 34, ÷, ×
The equation becomes ⇒ 15 × 80 – 10 + 34 ÷ 8 = 102
Solving the L.H.S. of the equation –
= 15 × 80 – 10 + 34 ÷ 8
= 1200 – 10 + 4.25
= 1194.25 ≠ 102

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

Q. 109 **Directions:** Which of the following interchanges of signs would make the given equation correct?
1000 – 448 + 14 ÷ 15 × 2 = 998

Option 1:
+ and ÷

Option 2:
× and ÷

Option 3:
– and +

Option 4:
÷ and –

Correct Answer:
+ and ÷

Solution:
Given:
1000 – 448 + 14 ÷ 15 × 2 = 998

Let's check the options –
First option: + and ÷
The equation becomes ⇒ 1000 – 448 ÷ 14 + 15 × 2 = 998
Solving the L.H.S. of the equation –
= 1000 – 448 ÷ 14 + 15 × 2
= 1000 – 32 + 30
= 998
Second option: × and ÷
The equation becomes ⇒ 1000 – 448 + 14 × 15 ÷ 2 = 998
Solving the L.H.S. of the equation –
= 1000 – 448 + 14 × 15 ÷ 2
= 1000 – 448 + 14 × 7.5
= 1000 – 448 + 105
= 657 ≠ 998
Third option: – and +
The equation becomes ⇒ 1000 + 448 – 14 ÷ 15 × 2 = 998
Solving the L.H.S. of the equation –
= 1000 + 448 – 14 ÷ 15 × 2
= 1000 + 448 – 0.93 × 2
= 1000 + 448 – 1.87
= 1446.13 ≠ 998
Fourth option: ÷ and –

The equation becomes ⇒ 1000 ÷ 448 + 14 – 15 × 2 = 998
Solving the L.H.S. of the equation –
= 1000 ÷ 448 + 14 – 15 × 2
= 2.23 + 14 – 30
= –13.77 ≠ 998

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

Q. 110 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols:
If × means –; – means ×; + means ÷ and ÷ means +; then
(15 – 10) ÷ (130 + 10) × 50 = ?

Option 1:
1800

Option 2:
113

Option 3:
2000

Option 4:
123

Correct Answer:
113

Solution:
Given:
× means –; – means ×; + means ÷ and ÷ means +.
(15 – 10) ÷ (130 + 10) × 50 = ?

After replacing the symbols, the equation becomes –
= (15 × 10) + (130 ÷ 10) – 50
= 150 + 13 – 50
= 163 – 50
= 113

So, 113 is the answer to the given equation. Hence, the **second option** is correct.

Q. 111

Directions: In the following question, you have to identify the correct response from the given premise stated according to the following symbols. If + means division; – means multiplication; ÷ means addition and × means subtraction. Then what is the value of 36 × 12 + 4 ÷ 6 + 2 – 3 = ?

Option 1:
42

Option 2:
18

Option 3:
40

Option 4:
2

Correct Answer:
42

Solution:
Given:
+ means division; – means multiplication; ÷ means addition and × means subtraction.
36 × 12 + 4 ÷ 6 + 2 – 3 = ?

After replacing the signs the equation becomes –
= 36 – 12 ÷ 4 + 6 ÷ 2 × 3
= 36 – 3 + 3 × 3
= 36 – 3 + 9
= 45 – 3
= 42

So, 42 is the answer to the given equation. Hence, the **first option** is correct.

Q. 112 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + means ÷, × means +, – means ×, and ÷ means –, then which of the following equations is correct?

Option 1:
36 × 6 + 3 – 2 < 20

Option 2:
36 × 6 + 3 × 2 = 20

Option 3:
36 + 6 × 3 + 2 = 20

Option 4:
36 + 6 – 3 × 2 = 20

Correct Answer:
36 + 6 – 3 × 2 = 20

Solution:
Given:
+ means ÷, × means +, – means ×, and ÷ means –

Let's check the options –

First option: 36 × 6 + 3 – 2 < 20

= 36 + 6 ÷ 3 × 2

= 36 + 2 × 2

= 36 + 4

= 40 > 20; L.H.S. is not smaller than R.H.S.

Second option: 36 × 6 + 3 × 2 = 20

= 36 + 6 ÷ 3 + 2

= 36 + 2 + 2

= 40 ≠ 20; L.H.S. ≠ R.H.S.

Third option: 36 + 6 × 3 + 2 = 20

= 36 ÷ 6 + 3 ÷ 2

= 6 + 1.5

= 7.5 ≠ 20; L.H.S. ≠ R.H.S.

Fourth option: 36 + 6 – 3 × 2 = 20

= 36 ÷ 6 × 3 + 2 = 20

= 6 × 3 + 2

= 18 + 2

= 20; L.H.S. = R.H.S.

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

Q. 113 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If × means +, ÷ means –, + means ÷, – means ×, then what should be the value of the given equation?
14 × 4 ÷ 70 + 10 – 2 = ?

Option 1:
33

Option 2:
15

Option 3:
30

Option 4:
4

Correct Answer:
4

Solution:
Given:
× means +, ÷ means –, + means ÷, – means ×
14 × 4 ÷ 70 + 10 – 2 = ?

After replacing the symbols, the equation becomes –
= 14 + 4 – 70 ÷ 10 × 2
= 14 + 4 – 7 × 2
= 14 + 4 – 14
= 4

So, 4 is the required answer to the given equation. Hence, the **fourth option** is correct.

Q. 114 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols:
If – stands for +; + stands for × and × stands for –; then which one of the following equations is not correct?

Option 1:
22 + 7 – 3 × 9 = 148

Option 2:
33 × 5 – 10 + 20 = 228

Option 3:
7 + 28 – 3 × 52 = 127

Option 4:
44 – 9 + 6 × 11 = 87

Correct Answer:

7 + 28 – 3 × 52 = 127

Solution:

Given:

– stands for +; + stands for × and × stands for –.

Let's check the options –

First option: 22 + 7 – 3 × 9 = 148

On replacing ⇒ 22 × 7 + 3 – 9 = 148

Solving the L.H.S. of the equation –

= 22 × 7 + 3 – 9

= 154 + 3 – 9

= 157 – 9

= 148 = R.H.S.

Second option: 33 × 5 – 10 + 20 = 228

On replacing ⇒ 33 – 5 + 10 × 20 = 228

Solving the L.H.S. of the equation –

= 33 – 5 + 10 × 20

= 33 – 5 + 200

= 233 – 5

= 228 = R.H.S.

Third option: 7 + 28 – 3 × 52 = 127

On replacing ⇒ 7 × 28 + 3 – 52 = 127

Solving the L.H.S. of the equation –

= 7 × 28 + 3 – 52

= 196 + 3 – 52

= 199 – 52

= 147 ≠ 127

Fourth option: 44 – 9 + 6 × 11 = 87
On replacing ⇒ 44 + 9 × 6 – 11 = 87
Solving the L.H.S. of the equation –
= 44 + 9 × 6 – 11
= 44 + 54 – 11
= 98 – 11
= 87 = R.H.S.

So, only the third option doesn't satisfy the R.H.S. of the given equation. Hence, the **third option** is correct.

Q. 115 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols:
If + stands for division; × stands for addition; – stands for multiplication and ÷ stands for subtraction.

Option 1:
5 – 3 + 2 × 4 ÷ 8 = 2

Option 2:
5 × 3 + 2 – 4 × 8 = 19

Option 3:
5 ÷ 3 × 2 – 4 + 8 = 8

Option 4:

5 + 3 × 2 ÷ 4 – 8 = 4

Correct Answer:

5 × 3 + 2 – 4 × 8 = 19

Solution:

Given:

+ stands for division; × stands for addition; – stands for multiplication and ÷ stands for subtraction.

Let's check the options –

First option: 5 – 3 + 2 × 4 ÷ 8 = 2

On replacing ⇒ 5 × 3 ÷ 2 + 4 – 8 = 2

Solving the L.H.S. of the equation –

= 5 × 3 ÷ 2 + 4 – 8

= 5 × 1.5 + 4 – 8

= 7.5 + 4 – 8

= 11.5 – 8

= 3.5 ≠ 2

Second option: 5 × 3 + 2 – 4 × 8 = 19

On replacing ⇒ 5 + 3 ÷ 2 × 4 + 8 = 19

Solving the L.H.S. of the equation –

= 5 + 3 ÷ 2 × 4 + 8

= 5 + 1.5 × 4 + 8

= 5 + 6 + 8

= 19 = R.H.S.

Third option: 5 ÷ 3 × 2 – 4 + 8 = 8

On replacing ⇒ 5 – 3 + 2 × 4 ÷ 8 = 8

Solving the L.H.S. of the equation –

= 5 – 3 + 2 × 4 ÷ 8

= 5 – 3 + 2 × 0.5

= 5 – 3 + 1

= 6 – 3

= 3 ≠ 8

Fourth option: 5 + 3 × 2 ÷ 4 – 8 = 4

On replacing ⇒ 5 ÷ 3 + 2 – 4 × 8 = 4

= 1.67 + 2 – 4 × 8

= 1.67 + 2 – 32

= 3.67 – 32

= –28.33 ≠ 4

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

Q. 116

Directions: In the following question you have to identify the correct response from the given premises stated according to the following symbols:

If a represents division; b represents addition; c represents subtraction; and d represents multiplication then 24 a 6 d 4 b 9 c 8 = ?

Option 1:

20

Option 2:
6

Option 3:
17

Option 4:
19

Correct Answer:
17

Solution:
Given:
a represents division; b represents addition; c represents subtraction; and d represents multiplication.
24 a 6 d 4 b 9 c 8 =?

On replacing the symbols with the mathematical signs, we get –
= 24 ÷ 6 × 4 + 9 – 8
= 4 × 4 + 9 – 8
= 16 + 9 – 8
= 25 – 8
= 17

So, 17 is the answer to the given equation. Hence,
the **third option** is correct.

Q. 117 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols:
If × means +, + means ÷, – means ×, and ÷ means –, then
6 × 4 – 5 + 2 ÷ 1 = ?

Option 1:
11

Option 2:
15

Option 3:
10

Option 4:
12

Correct Answer:
15

Solution:
Given:
× means +, + means ÷, – means ×, and ÷ means –.
6 × 4 – 5 + 2 ÷ 1 = ?

On replacing the symbols with the mathematical signs, we get –
= 6 + 4 × 5 ÷ 2 – 1
= 6 + 4 × 2.5 – 1
= 6 + 10 – 1
= 16 – 1
= 15

So, 15 is the answer to the given equation. Hence,
the **second option** is correct.

Q. 118

Directions: In the following question you have to identify the correct response from the given premises stated according to the following symbols.
If – stands for addition, + stands for multiplication,
÷ stands for subtraction, × stands for division, which one of the following equations is correct?

Option 1:
5 + 2 – 12 ÷ 6 × 2 = 13

Option 2:
5 + 2 – 12 × 6 ÷ 2 = 10

Option 3:
5 ÷ 2 + 12 × 6 – 2 = 4

Option 4:
5 – 2 +12 × 6 ÷ 2 = 27

Correct Answer:
5 + 2 – 12 × 6 ÷ 2 = 10

Solution:
Given:
– stands for addition, + stands for multiplication, ÷ stands for subtraction, × stands for division.

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: 5 + 2 – 12 ÷ 6 × 2 = 13
On replacing the symbols, we get –
= 5 × 2 + 12 – 6 ÷ 2
= 5 × 2 + 12 – 3
= 10 + 12 – 3
= 19 ≠ 13
Second option: 5 + 2 – 12 × 6 ÷ 2 = 10
On replacing the symbols, we get –
= 5 × 2 + 12 ÷ 6 – 2
= 5 × 2 + 2 – 2
= 10 + 2 – 2
= 10
Third option: 5 ÷ 2 + 12 × 6 – 2 = 4
On replacing the symbols, we get –
= 5 – 2 × 12 ÷ 6 + 4
= 5 – 2 × 2 + 4

= 5 – 4 + 4

= 5 ≠ 4

Fourth option: 5 – 2 + 12 × 6 ÷ 2 = 27

On replacing the symbols, we get –

= 5 + 2 × 12 ÷ 6 – 2

= 5 + 2 × 2 – 2

= 5 + 4 – 2

= 7 ≠ 27

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

Q. 119 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If × stands for ÷, ÷ stands for +, + stands for –, – stands for × then what is the value of (30 + 20) – 5(7 ÷ 3) × 25 = ?

Option 1:
100

Option 2:
10

Option 3:
20

Option 4:
25

Correct Answer:
20

Solution:
Given:
× stands for ÷, ÷ stands for +, + stands for –, – stands for ×
(30 + 20) – 5(7 ÷ 3) × 25 = ?

On replacing the mathematical signs according to the instructions given, we get –
= (30 – 20) × 5(7 + 3) ÷ 25
= 10 × 5(10) ÷ 25
= 10 × 50 ÷ 25
= 10 × 2
= 20

Therefore, the required answer is 20. Hence, the **third option** is correct.

Q. 120 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + means ÷, ÷ means –, – means ×, × means +,
then 12 – 8 × 6 – 4 ÷ 6 + 3 = ?

Option 1:
–112

Option 2:
118

Option 3:
–33

Option 4:
92

Correct Answer:
118

Solution:
Given:
+ means ÷, ÷ means –, – means ×, × means +
12 – 8 × 6 – 4 ÷ 6 + 3 = ?

On replacing the symbols according to the instructions given, we get –
= 12 × 8 + 6 × 4 – 6 ÷ 3
= 12 × 8 + 6 × 4 – 2
= 96 + 24 – 2
= 120 – 2
= 118

Therefore, the required answer is 118. Hence, the **second option** is correct.

Q. 121 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + means ÷, ÷ means × and × means +, then what will be the value of the following equation?
64 + 8 × 32 ÷ 4 = ?

Option 1:
128

Option 2:
160

Option 3:
136

Option 4:
144

Correct Answer:
136

Solution:

Given:

+ means ÷, ÷ means × and × means +

64 + 8 × 32 ÷ 4 = ?

On replacing the signs in the equation according to the instructions given, we get –

= 64 ÷ 8 + 32 × 4

= 8 + 32 × 4

= 8 + 128

= 136

So, 136 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 122 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols. If – denotes +, + denotes ×, ÷ denotes –, and × denotes ÷, then, what will be the answer to the given equation?

27 × 3 ÷ 6 + 9 – 8 = ?

Option 1:

15

Option 2:

14.5

Option 3:
–37

Option 4:
3.5

Correct Answer:
–37

Solution:
Given:
27 × 3 ÷ 6 + 9 – 8 = ?

After replacing the symbols according to the instructions, the equation is as follows –
= 27 ÷ 3 – 6 × 9 + 8
= 9 – 54 + 8
= –37

Therefore, the required answer is –37. Hence, the **third option** is correct.

Q. 123 **Directions:** Which of the following interchanges of signs would make the given equation correct?
50 – 25 ÷ 5 × 3 + 6 = 59

Option 1:
+ and ×

Option 2:
÷ and +

Option 3:
× and –

Option 4:
– and +

Correct Answer:
– and +

Solution:
Given:
50 – 25 ÷ 5 × 3 + 6 = 59

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 ×
= 50 – 25 ÷ 5 + 3 × 6
= 50 – 5 + 3 × 6
= 50 – 5 + 18
= 63 ≠ 59
Second option: ÷ and +
= 50 – 25 + 5 × 3 ÷ 6

= 50 – 25 + 2.5

= 27.5 ≠ 59

Third option: × and –

= 50 × 25 ÷ 5 – 3 + 6

= 50 × 5 – 3 + 6

= 250 – 3 + 6

= 253 ≠ 59

Fourth option: – and +

= 50 + 25 ÷ 5 × 3 – 6

= 50 + 5 × 3 – 6

= 50 + 15 – 6

= 59

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

Q. 124 **Directions:** Which of the following interchanges of signs would make the given equation correct?
162 ÷ 3 + 5 × 6 – 2 = 274

Option 1:
+ and –

Option 2:
÷ and ×

Option 3:
– and ÷

Option 4:
+ and ×

Correct Answer:
+ and ×

Solution:
Given:
162 ÷ 3 + 5 × 6 – 2 = 274

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

First option: + and –
= 162 ÷ 3 – 5 × 6 + 2
= 54 – 5 × 6 + 2
= 54 – 30 + 2
= 56 – 30
= 26 ≠ 274

Second option: ÷ and ×
= 162 × 3 + 5 ÷ 6 – 2
= 162 × 3 + 0.84 – 2
= 486 + 0.84 – 2
= 486.84 – 2
= 484.84 ≠ 274

Third option: – and ÷
= 162 – 3 + 5 × 6 ÷ 2

= 162 – 3 + 5 × 3

= 162 – 3 + 15

= 177 – 3

= 174 ≠ 274

Fourth option: + and ×

= 162 ÷ 3 × 5 + 6 – 2

= 54 × 5 + 6 – 2

= 270 + 6 – 2

= 276 – 2

= 274

So, from the above, only the fourth option satisfies the given equation.

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

Q. 125 **Directions:** Which of the following interchanges of signs would make the given equation correct?

110 ÷ 20 + 5 × 13 – 9 = 153

Option 1:

× and +

Option 2:

÷ and +

Option 3:

– and ×

Option 4:
+ and –

Correct Answer:
÷ and +

Solution:
Given:
110 ÷ 20 + 5 × 13 – 9

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: + and ×
= 110 ÷ 20 × 5 + 13 – 9
= 5.5 × 5 + 13 – 9
= 27.5 + 4
= 31.5 ≠ 153
Second option: ÷ and +
= 110 + 20 ÷ 5 × 13 – 9
= 110 + 4 × 13 – 9
= 110 + 52 – 9
= 153
Third option: – and ×
= 110 ÷ 20 + 5 – 13 × 9
= 5.5 + 5 – 117
= –106.5 ≠ 153
Fourth option: + and –
= 110 ÷ 20 – 5 × 13 + 9

= 5.5 – 65 + 9
= 14.5 – 65
= –50.5 ≠ 153

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

Q. 126 **Directions:** If + means division, – means multiplication, ÷ means subtraction, and × means addition, then what is the value of the following expression?
805 + 23 ÷ 4 – 6 × 2

Option 1:
32

Option 2:
25

Option 3:
29

Option 4:
13

Correct Answer:
13

Solution:

Given:

+ means division, – means multiplication, ÷ means subtraction, and × means addition

805 + 23 ÷ 4 – 6 × 2

After interchanging the equation becomes –

= 805 ÷ 23 – 4 × 6 + 2

= 35 – 4 × 6 + 2

= 35 – 24 + 2

= 13

So, 13 is the required answer to the given equation. Hence, **the fourth option** is correct.

Q. 127 **Directions:** Which of the following interchange of numbers and signs would make the given equation correct?

24 × 9 + 6 ÷ 24 – 18 = 22

Option 1:

18 and 22, + and –

Option 2:

24 and 6, × and +

Option 3:

6 and 9, ÷ and +

Option 4:
6 and 18, ÷ and ×

Correct Answer:
6 and 9, ÷ and +

Solution:
Given:
$24 \times 9 + 6 \div 24 - 18 = 22$

Let's check the given options –
First option: 18 and 22, + and –
$\Rightarrow 24 \times 9 - 6 \div 24 + 22 = 18$
Solving the L.H.S. of the equation –
$= 24 \times 9 - 0.25 + 22$
$= 216 - 0.25 + 22$
$= 238 - 0.25$
$= 237.75 \neq 18$
Second option: 24 and 6, × and +
Since there are two 24s in the equation, it is unclear which 24 should be replaced by 6. So, this option is incorrect.
Third option: 6 and 9, ÷ and +
$\Rightarrow 24 \times 6 \div 9 + 24 - 18 = 22$
Solving the L.H.S. of the equation –
$= 24 \times 6 \div 9 + 24 - 18$
$= 16 + 24 - 18$
$= 40 - 18$
$= 22$ = R.H.S.

Fourth option: 6 and 18, ÷ and ×

⇒ 24 ÷ 9 + 18 × 24 – 6 = 22

Solving the L.H.S. of the equation –

= 24 ÷ 9 + 18 × 24 – 6

= 2.67 + 18 × 24 – 6

= 2.67 + 432 – 6

= 434.67 – 6

= 428.67 ≠ 22

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

Q. 128 **Directions:** Which of the following interchanges of signs and numbers would make the given equation correct?

25 – 10 ÷ 5 + 15 × 30 = 55

Option 1:

× and ÷, 30 and 25

Option 2:

÷ and +, 15 and 10

Option 3:

× and –, 15 and 10

Option 4:

+ and –, 5 and 10

Correct Answer:

× and –, 15 and 10

Solution:

Given:

25 – 10 ÷ 5 + 15 × 30 = 55

Let's check the options –

First option: × and ÷, 30 and 25

⇒ 30 – 10 × 5 + 15 ÷ 25 = 55

Solving the L.H.S. of the equation –

= 30 – 10 × 5 + 0.6

= 30 – 50 + 0.6

= 30.6 – 50

= –19.4 ≠ 55

Second option: ÷ and +, 15 and 10

⇒ 25 – 15 + 5 ÷ 10 × 30 = 55

Solving the L.H.S. of the equation –

= 25 – 15 + 0.5 × 30

= 25 – 15 + 15

= 40 – 15

= 25 ≠ 55

Third option: × and –, 15 and 10

⇒ 25 × 15 ÷ 5 + 10 – 30 = 55

Solving the L.H.S. of the equation –

= 25 × 3 + 10 – 30

= 75 + 10 – 30

= 85 – 30

= 55 = R.H.S.

Fourth option: + and –, 5 and 10

⇒ 25 + 5 ÷ 10 – 15 × 30 = 55

Solving the L.H.S. of the equation –

= 25 + 0.5 – 15 × 30

= 25 + 0.5 – 450

= 25.5 – 450

= –424.5 ≠ 55

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

Q. 129 **Directions:** If < means –, ! means ×, > means +, and @ means ÷, then what is the value of the following expression?

205 > 210 @ 15 ! 2 < 19

Option 1:

242

Option 2:

238

Option 3:
214

Option 4:
226

Correct Answer:
214

Solution:
Given:
< means –, ! means ×, > means +, and @ means ÷
205 > 210 @ 15 ! 2 < 19

After replacing the symbols, the equation is as follows –
= 205 + 210 ÷ 15 × 2 – 19
= 205 + 14 × 2 – 19
= 205 + 28 – 19
= 233 – 19
= 214

So, 214 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 130 **Directions:** Which two signs should be interchanged to make the given equation correct?
312 – 13 × 14 + 207 ÷ 4 = 539

Option 1:
÷ and –

Option 2:
– and +

Option 3:
÷ and +

Option 4:
+ and ×

Correct Answer:
÷ and –

Solution:
Given:
312 – 13 × 14 + 207 ÷ 4 = 539

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: ÷ and –
= 312 ÷ 13 × 14 + 207 – 4
= 24 × 14 + 207 – 4
= 336 + 207 – 4
= 539
Second option: – and +
= 312 + 13 × 14 – 207 ÷ 4
= 312 + 13 × 14 – 51.75

= 312 + 182 – 51.75
= 442.25 ≠ 539

Third option: ÷ and +
= 312 – 13 × 14 ÷ 207 + 4
= 312 – 13 × 0.067 + 4
= 312 – 0.88 + 4
= 315.12 ≠ 539

Fourth option: + and ×
= 312 – 13 + 14 × 207 ÷ 4
= 312 – 13 + 14 × 51.75
= 312 – 13 + 724.5
= 1023.5 ≠ 539

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

Q. 131 **Directions:** What will come in the place of the question mark (?) in the following equation if + and – are interchanged and × and ÷ are interchanged?
13 ÷ 182 × 14 – 45 + 24 = ?

Option 1:
194

Option 2:
183

Option 3:
190

Option 4:
187

Correct Answer:
190

Solution:
Given:
13 ÷ 182 × 14 – 45 + 24 = ?

After interchanging + with –, and × with ÷, the equation will be as follows –
= 13 × 182 ÷ 14 + 45 – 24
= 13 × 13 + 45 – 24
= 169 + 45 – 24
= 214 – 24
= 190

So, 190 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 132 **Directions:** What will come in the place of (?) in the following equation, if + and – are interchanged and × and ÷ are interchanged?
26 ÷ 6 + 24 × 3 – 6 = ?

Option 1:
124

Option 2:
154

Option 3:
134

Option 4:
144

Correct Answer:
154

Solution:
Given:
26 ÷ 6 + 24 × 3 – 6 = ?

After interchanging + with –, and × with ÷, the equation will be as follows –
= 26 × 6 – 24 ÷ 3 + 6
= 26 × 6 – 8 + 6
= 156 – 8 + 6
= 162 – 8
= 154

So, 154 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 133 **Directions:** Which two signs should be interchanged to make the given equation correct?
588 ÷ 28 × 32 + 72 – 160 = 760

Option 1:
– and +

Option 2:
÷ and –

Option 3:
+ and ×

Option 4:
÷ and +

Correct Answer:
– and +

Solution:
Given:
588 ÷ 28 × 32 + 72 – 160 = 760

Interchange the mathematical signs given in the equation with the signs given in the options one by one –
First option: – and +
⇒ 588 ÷ 28 × 32 – 72 + 160 = 760

Solving L.H.S. of the equation –

= 21 × 32 – 72 + 160

= 672 – 72 + 160

= 760 = R.H.S.

Second option: ÷ and –

⇒ 588 – 28 × 32 + 72 ÷ 160 = 760

Solving L.H.S. of the equation –

= 588 – 28 × 32 + 0.45

= 588 – 896 + 0.45

= –307.55 ≠ 760

Third option: + and ×

⇒ 588 ÷ 28 + 32 × 72 – 160 = 760

Solving L.H.S. of the equation –

= 21 + 32 × 72 – 160

= 21 + 2304 – 160

= 2165 ≠ 760

Fourth option: ÷ and +

⇒ 588 + 28 × 32 ÷ 72 – 160 = 760

Solving L.H.S. of the equation –

= 588 + 28 × 0.44 – 160

= 588 + 12.32 – 160

= 440.32 ≠ 760

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

Q. 134 **Directions:** Which two signs should be interchanged to make the given equation correct?
171 ÷ 3 – 16 + 72 × 412 = 572

Option 1:
× and –

Option 2:
÷ and –

Option 3:
+ and ÷

Option 4:
– and +

Correct Answer:
× and –

Solution:
Given:
171 ÷ 3 – 16 + 72 × 412 = 572

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: × and –
= 171 ÷ 3 × 16 + 72 – 412

= 57 × 16 + 72 – 412

= 912 + 72 – 412

= 984 – 412

= 572

Second option: ÷ and –

= 171 – 3 ÷ 16 + 72 × 412

= 171 – 0.1875 + 72 × 412

= 171 – 0.1875 + 29664

= 29835 – 0.1875

= 29834.8125 ≠ 572

Third option: + and ÷

= 171 + 3 – 16 ÷ 72 × 412

= 171 + 3 – 0.22 × 412

= 171 + 3 – 90.64

= 174 – 90.64

= 83.36 ≠ 572

Fourth option: – and +

= 171 ÷ 3 + 16 – 72 × 412

= 57 + 16 – 72 × 412

= 57 + 16 – 29664

= 73 – 29664

= –29591 ≠ 572

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

Q. 135 **Directions:** Which two signs should be interchanged to make the given equation correct?
17 × 4 + 6 ÷ 2 – 27 = 92

Option 1:
+ and ×

Option 2:
÷ and ×

Option 3:
+ and –

Option 4:
× and –

Correct Answer:
+ and –

Solution:
Given:
17 × 4 + 6 ÷ 2 – 27 = 92

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: + and ×
= 17 + 4 × 6 ÷ 2 – 27

= 17 + 4 × 3 – 27

= 17 + 12 – 27

= 29 – 27

= 2 ≠ 92

Second option: ÷ and ×

= 17 ÷ 4 + 6 × 2 – 27

= 4.25 + 6 × 2 – 27

= 4.25 + 12 – 27

= 16.25 – 27

= –10.75 ≠ 92

Third option: + and –

= 17 × 4 – 6 ÷ 2 + 27

= 17 × 4 – 3 + 27

= 68 – 3 + 27

= 95 – 3

= 92

Fourth option: × and –

= 17 – 4 + 6 ÷ 2 × 27

= 17 – 4 + 3 × 27

= 17 – 4 + 81

= 98 – 4

= 94 ≠ 92

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

Q. 136 **Directions:** Which two mathematical operations should be interchanged to balance the following equation?
19 – 39 × 3 + 25 ÷ 5 = 131

Option 1:
+ and ÷

Option 2:
÷ and ×

Option 3:
– and ÷

Option 4:
+ and ×

Correct Answer:
÷ and ×

Solution:
Given:
19 – 39 × 3 + 25 ÷ 5 = 131

Let's check the options –
First option: + and ÷
= 19 – 39 × 3 ÷ 25 + 5
= 19 – 39 × 0.12 + 5

= 19 – 4.68 + 5

= 24 – 4.68

= 19.32 ≠ 131

Second option: ÷ and ×

= 19 – 39 ÷ 3 + 25 × 5

= 19 – 13 + 25 × 5

= 19 – 13 + 125

= 144 – 13

= 131

Third option: – and ÷

= 19 ÷ 39 × 3 + 25 – 5

= 0.49 × 3 + 25 – 5

= 1.47 + 25 – 5

= 26.47 – 5

= 21.47 ≠ 131

Fourth option: + and ×

= 19 – 39 + 3 × 25 ÷ 5

= 19 – 39 + 3 × 5

= 19 – 39 + 15

= 34 – 39

= –5 ≠ 131

Here, only the second option satisfies the R.H.S. of the given equation.

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

Q. 137 **Directions:** What will come in the place of (?) in the following equation, if + and – are interchanged with × and ÷ respectively?
18 × 17 + 4 ÷ 22 – 2 = ?

Option 1:
81

Option 2:
75

Option 3:
70

Option 4:
64

Correct Answer:
75

Solution:
Given:
18 × 17 + 4 ÷ 22 – 2 = ?

After interchanging + with ×, and – with ÷, the equation will be as follows –
= 18 + 17 × 4 – 22 ÷ 2

= 18 + 17 × 4 – 11
= 18 + 68 – 11
= 86 – 11
= 75

So, 75 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 138 **Directions:** What will come in the place of (?) in the following equation, if + and – are interchanged and × and ÷ are interchanged?
15 ÷ 5 + 12 × 3 – 5 = ?

Option 1:
96

Option 2:
66

Option 3:
76

Option 4:
86

Correct Answer:
76

Solution:
Given:
15 ÷ 5 + 12 × 3 – 5 = ?

After interchanging + with –, and × with ÷, the equation will be as follows –
= 15 × 5 – 12 ÷ 3 + 5
= 15 × 5 – 4 + 5
= 75 – 4 + 5
= 80 – 4
= 76

So, 76 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 139 **Directions:** Which two signs should be interchanged to make the given equation correct?
625 ÷ 25 + 7 × 318 – 112 = 381

Option 1:
– and +

Option 2:
÷ and +

Option 3:
÷ and –

Option 4:
+ and ×

Correct Answer:
+ and ×

Solution:
Given:
625 ÷ 25 + 7 × 318 – 112 = 381

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: – and +
= 625 ÷ 25 – 7 × 318 + 112
= 25 – 7 × 318 + 112
= 25 – 2226 + 112
= 137 – 2226
= –2089 ≠ 381
Second option: ÷ and +
= 625 + 25 ÷ 7 × 318 – 112
= 625 + 3.57 × 318 – 112
= 625 + 1135.26 – 112
= 1760.26 – 112
= 1648.26 ≠ 381
Third option: ÷ and –
= 625 – 25 + 7 × 318 ÷ 112
= 625 – 25 + 7 × 2.84
= 625 – 25 + 19.88

= 644.88 – 25

= 619.88 ≠ 381

Fourth option: + and ×

= 625 ÷ 25 × 7 + 318 – 112

= 25 × 7 + 318 – 112

= 175 + 318 – 112

= 493 – 112

= 381

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

Q. 140 **Directions:** In the following question you have to identify the correct response from the given
premises stated according to the following symbols. Which one of the following interchanges of signs would make the given equation correct?
5 + 3 × 8 – 12 ÷ 4 = 3

Option 1:
– and ÷

Option 2:
+ and ×

Option 3:
+ and ÷

Option 4:
+ and –

Correct Answer:
– and ÷

Solution:
Given:
5 + 3 × 8 – 12 ÷ 4 = 3

Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: – and ÷
⇒ 5 + 3 × 8 ÷ 12 – 4
= 5 + 2 – 4
= 7 – 4
= 3
Second option: + and ×
⇒ 5 × 3 + 8 – 12 ÷ 4
= 5 × 3 + 8 – 3
= 15 + 8 – 3
= 23 – 3
= 20 ≠ 3
Third option: + and ÷
⇒ 5 ÷ 3 × 8 – 12 + 4
= 1.67 × 8 –12 + 4

= 13.36 – 12 + 4

= 17.36 – 12

= 5.36 ≠ 3

Fourth option: + and –

⇒ 5 – 3 × 8 + 12 ÷ 4

= 5 – 3 × 8 + 3

= 5 – 24 + 3

= 8 – 24

= –16 ≠ 3

Therefore, only the first option satisfies the R.H.S. of the given equation.

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

Q. 141 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + stands for division; × stands for addition; – stands for multiplication; and ÷ stands for subtraction; then which of the following equations is correct?

Option 1:

33 × 4 – 5 + 6 ÷ 2 = 26

Option 2:

33 ÷ 4 × 5 + 6 – 2 = 30

Option 3:
33 – 4 + 5 ÷ 6 × 2 = 24

Option 4:
33 – 4 ÷ 5 × 6 + 2 = 130

Correct Answer:
33 – 4 ÷ 5 × 6 + 2 = 130

Solution:
Given:
+ stands for division; × stands for addition; – stands for multiplication; and ÷ stands for subtraction.

Let's check the given options –
Replace the given symbols in the options one by one with the original symbols in the given equation.
First option: 33 × 4 – 5 + 6 ÷ 2 = 26
Now, replace the symbols as per the instructions given –
= 33 + 4 × 5 ÷ 6 – 2
= 33 + 4 × 0.83 – 2
= 33 + 3.32 – 2
= 36.32 – 2
= 34.32 ≠ 26
Second option: 33 ÷ 4 x 5 + 6 – 2 = 30
Now, replace the symbols as per the instructions given –
= 33 – 4 + 5 ÷ 6 × 2
= 33 – 4 + 0.83 × 2
= 33 – 4 + 1.66

= 34.66 – 4

= 30.66 ≠ 30

Third option: 33 – 4 + 5 ÷ 6 × 2 = 24

Now, replace the symbols as per the instructions given –

= 33 × 4 ÷ 5 – 6 + 2

= 33 × 0.8 – 6 + 2

= 26.4 – 6 + 2

= 28.4 – 6

= 22.4 ≠ 24

Fourth option: 33 – 4 ÷ 5 × 6 + 2 = 130

Now, replace the symbols as per the instructions given –

= 33 × 4 – 5 + 6 ÷ 2

= 33 × 4 – 5 + 3

= 132 – 5 + 3

= 135 – 5

= 130 = R.H.S.

So, only the fourth option satisfies the R.H.S. of the given equation.

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

Q. 142 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If × means addition, – means division, ÷ means subtraction, and + means multiplication, then which of the equations is correct?

Option 1:
16 × 5 ÷ 10 + 4 – 3 = 19

Option 2:
16 + 5 ÷ 10 × 4 – 3 = 9

Option 3:
16 + 5 – 10 × 4 ÷ 3 = 9

Option 4:
16 – 5 × 10 ÷ 4 + 3 = 12

Correct Answer:
16 + 5 – 10 × 4 ÷ 3 = 9

Solution:
Given:
× means addition, – means division, ÷ means subtraction, and
+ means multiplication.

Replace the mathematical signs in the equations and solve the equations one by one.
Let's check the given options –
First option: 16 × 5 ÷ 10 + 4 – 3 = 19
⇒ 16 + 5 – 10 × 4 ÷ 3 = 19
Solving L.H.S. of the equation –
= 16 + 5 – 10 × 1.33
= 16 + 5 – 13.33
= 21 – 13.33

= 7.67 ≠ 19

Second option: 16 + 5 ÷ 10 × 4 – 3 = 9

⇒ 16 × 5 – 10 + 4 ÷ 3 = 9

Solving L.H.S. of the equation –

= 16 × 5 – 10 + 1.33

= 80 – 10 + 1.33

= 81.33 – 10

= 71.33 ≠ 9

Third option: 16 + 5 – 10 × 4 ÷ 3 = 9

⇒ 16 × 5 ÷ 10 + 4 – 3 = 9

Solving L.H.S. of the equation –

= 16 × 0.5 + 4 – 3

= 8 + 4 – 3

= 12 – 3

= 9 = R.H.S.

Fourth option: 16 – 5 × 10 ÷ 4 + 3 = 12

⇒ 16 ÷ 5 + 10 – 4 × 3 = 12

Solving L.H.S. of the equation –

= 3.2 + 10 – 4 × 3

= 3.2 + 10 – 12

= 13.2 – 12

= 1.2 ≠ 12

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

Q. 143 **Directions:** If + means division, – means multiplication, ÷ means addition, and × means subtraction, then what is the value of the following expression?
14 – 4 ÷ 133 + 7 × 17

Option 1:
58

Option 2:
69

Option 3:
84

Option 4:
64

Correct Answer:
58

Solution:
Given:
+ means division, – means multiplication, ÷ means addition, and × means subtraction
14 – 4 ÷ 133 + 7 × 17

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

= 14 × 4 + 133 ÷ 7 – 17

= 14 × 4 + 19 – 17

= 56 + 19 – 17

= 75 – 17

= 58

So, 58 is the answer to the given equation. Hence, the **first option** is correct.

Q. 144

Directions: In the following question you have to identify the correct response from the given premises stated according to the following symbols. If + is ×, – is +, × is ÷ and ÷ is –, then answer the following questions based on this information.

9 – 4 + 2 ÷ 16 × 2 = ?

Option 1:

71

Option 2:

62

Option 3:

9

Option 4:
24

Correct Answer:
9

Solution:
Given:
+ is ×, – is +, × is ÷ and ÷ is –
9 – 4 + 2 ÷ 16 × 2

After replacing the symbols according to the question, the equation will be as follows –
= 9 + 4 × 2 – 16 ÷ 2
= 9 + 4 × 2 – 8
= 9 + 8 – 8
= 17 – 8
= 9

So, 9 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 145 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols.
If × means addition, – means division, / means subtraction, and + means multiplication, then which of the equations is correct?

Option 1:
25 + 10 – 5 / 10 × 3 = 43

Option 2:
25 – 10 × 5 + 10 / 3 = 72

Option 3:
25 × 10 / 5 + 10 – 3 = 12

Option 4:
25 / 10 + 5 × 10 / 3 = 18

Correct Answer:
25 + 10 – 5 / 10 × 3 = 43

Solution:
Given:
× means addition, – means division, / means subtraction, and + means multiplication.

Let's check the given options –

First option: 25 + 10 – 5 / 10 × 3 = 43

Now, replace the given symbols –

= 25 × 10 ÷ 5 – 10 + 3

= 25 × 2 – 10 + 3

= 50 – 10 + 3

= 53 – 10

= 43 = R.H.S.

Second option: 25 – 10 × 5 + 10 / 3 = 72

Now, replace the given symbols –

= 25 ÷ 10 + 5 × 10 – 3

= 2.5 + 5 ×10 – 3

= 2.5 + 50 – 3

= 52.5 – 3

= 49.5 ≠ 72

Third option: 25 × 10 / 5 + 10 – 3 = 12

Now, replace the given symbols –

= 25 + 10 – 5 × 10 ÷ 3

= 25 + 10 – 5 × 3.33

= 25 + 10 – 16.65

= 35 – 16.65

= 18.35 ≠ 12

Fourth option: 25 / 10 + 5 × 10 / 3 = 18

Now, replace the given symbols –

= 25 – 10 × 5 + 10 – 3

= 25 – 50 + 10 – 3

= 35 – 53

= –18 ≠ 18

So, only in the first option L.H.S. = R.H.S. Hence, the **first option** is correct.

Q. 146 **Directions:** What will come in the place of (?) in the following equation, if × and ÷ are interchanged?
101 + 38 – 78 × 3 ÷ 9 = ?

Option 1:
–100

Option 2:
–95

Option 3:
–78

Option 4:
–85

Correct Answer:
–95

Solution:
Given:
101 + 38 – 78 × 3 ÷ 9 = ?

On interchanging the mathematical signs as per given instructions, we get –

= 101 + 38 – 78 ÷ 3 × 9

= 101 + 38 – 26 × 9

= 101 + 38 – 234

= 139 – 234

= –95

So, –95 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 147 **Directions:** Which two signs should be interchanged to make the given equation correct?

912 – 456 × 28 + 390 ÷ 2 = 444

Option 1:

÷ and –

Option 2:

÷ and +

Option 3:

– and +

Option 4:

+ and ×

Correct Answer:

÷ and –

Solution:

Given:

912 – 456 × 28 + 390 ÷ 2 = 444

Replace the given symbols in the options one by one with the original symbols in the given equation and apply the BODMAS rule.

First option: ÷ and –

= 912 ÷ 456 × 28 + 390 – 2

= 2 × 28 + 390 – 2

= 56 + 390 – 2

= 446 – 2

= 444

Second option: ÷ and +

= 912 – 456 × 28 ÷ 390 + 2

= 912 – 456 × 0.07 + 2

= 912 – 31.92 + 2

= 914 – 31.92

= 882.08 ≠ 444

Third option: – and +

= 912 + 456 × 28 – 390 ÷ 2

= 912 + 456 × 28 – 195

= 912 + 12768 – 195

= 13680 – 195

= 13485 ≠ 444

Fourth option: + and ×

= 912 – 456 + 28 × 390 ÷ 2

= 912 – 456 + 28 × 195

= 912 – 456 + 5460

= 6372 – 456

= 5916 ≠ 444

So, only the first option satisfies the R.H.S. of the given equation.

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

Q. 148 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + stands for multiplication, – stands for addition, and × stands for division, then what is the value of 128 + 9 – 16 × 4 =?

Option 1:
73

Option 2:
256

Option 3:
1156

Option 4:
1352

Correct Answer:
1156

Solution:
Given:
+ stands for multiplication, – stands for addition, and × stands for division.
128 + 9 – 16 × 4 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 128 × 9 + 16 ÷ 4
= 128 × 9 + 4
= 1152 + 4
= 1156

So, 1156 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 149 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + stands for division, ÷ stands for multiplication, × stands for subtraction, and –stands for addition, then which of the following expressions is correct?

Option 1:
18 × 6 + 7 ÷ 5 – 2 = 16

Option 2:
18 ÷ 6 × 7 + 5 – 2 = 22

Option 3:
18 ÷ 6 – 7 + 5 × 2 = 20

Option 4:
18 + 6 ÷ 7 × 5 – 2 = 18

Correct Answer:
18 + 6 ÷ 7 × 5 – 2 = 18

Solution:
Given:
+ stands for division, ÷ stands for multiplication, × stands for subtraction, and –stands for addition.

Replace the mathematical signs and solve the equations.
Let's check the given options –
First option: 18 × 6 + 7 ÷ 5 – 2 = 16
⇒ 18 – 6 ÷ 7 × 5 + 2 = 16
Solving L.H.S. of the equation –
= 18 – 0.85 × 5 + 2
= 18 – 4.25 + 2
= 20 – 4.25
= 15.75 ≠ 16

Second option: 18 ÷ 6 × 7 + 5 – 2 = 22

⇒ 18 × 6 – 7 ÷ 5 + 2 = 22

Solving L.H.S. of the equation –

= 18 × 6 – 1.4 + 2

= 108 – 1.4 + 2

= 110 – 1.4

= 108.6 ≠ 22

Third option: 18 ÷ 6 – 7 + 5 × 2 = 20

⇒ 18 × 6 + 7 ÷ 5 – 2 = 20

Solving L.H.S. of the equation –

= 18 × 6 + 1.4 – 2

= 108 + 1.4 – 2

= 109.4 – 2

= 107.4 ≠ 20

Fourth option: 18 + 6 ÷ 7 × 5 – 2 = 18

⇒ 18 ÷ 6 × 7 – 5 + 2 = 18

Solving L.H.S. of the equation –

= 3 × 7 – 5 + 2

= 21 – 5 + 2

= 23 – 5

= 18 = R.H.S.

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

Q. 150 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + stands for multiplication, – stands for division, × stands for addition, and ÷ stands for subtraction, then which one of the following equations is correct?

Option 1:
12 × 5 + 4 – 5 ÷ 4 = 20

Option 2:
12 ÷ 5 + 4 – 5 × 4 = 18

Option 3:
12 + 5 – 4 × 5 ÷ 4 = 16

Option 4:
12 ÷ 5 – 4 × 5 + 4 = 22

Correct Answer:
12 + 5 – 4 × 5 ÷ 4 = 16

Solution:
Given:
+ stands for multiplication, – stands for division, × stands for addition, and ÷ stands for subtraction.

Replace the mathematical signs and solve the equations.

Let's check the given options –

First option: $12 \times 5 + 4 - 5 \div 4 = 20$

$\Rightarrow 12 + 5 \times 4 \div 5 - 4 = 20$

Solving L.H.S. of the equation –

$= 12 + 5 \times 0.8 - 4$

$= 12 + 4 - 4$

$= 16 - 4$

$= 12 \neq 20$

Second option: $12 \div 5 + 4 - 5 \times 4 = 18$

$\Rightarrow 12 - 5 \times 4 \div 5 + 4 = 18$

Solving L.H.S. of the equation –

$= 12 - 5 \times 0.8 + 4$

$= 12 - 4 + 4$

$= 16 - 4$

$= 12 \neq 18$

Third option: $12 + 5 - 4 \times 5 \div 4 = 16$

$\Rightarrow 12 \times 5 \div 4 + 5 - 4 = 16$

Solving L.H.S. of the equation –

$= 12 \times 1.25 + 5 - 4$

$= 15 + 5 - 4$

$= 20 - 4$

$= 16 = \text{R.H.S.}$

Fourth option: $12 \div 5 - 4 \times 5 + 4 = 22$

$\Rightarrow 12 - 5 \div 4 + 5 \times 4 = 22$

Solving L.H.S. of the equation –

$= 12 - 1.25 + 5 \times 4$

= 12 – 1.25 + 20
= 32 – 1.25
= 30.75 ≠ 22

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

Q. 151 **Directions:** Which of the following interchanges in two mathematical operations will balance the equation given below?
14 – 96 × 24 + 16 ÷ 4 = 74

Option 1:
– and ÷

Option 2:
+ and –

Option 3:
÷ and ×

Option 4:
+ and ×

Correct Answer:
÷ and ×

Solution:

Given:

14 – 96 × 24 + 16 ÷ 4 = 74

Replace the signs given in the equation with the assigned signs in the options one by one –

First option: – and ÷

= 14 ÷ 96 × 24 + 16 – 4

= 0.146 × 24 + 16 – 4

= 3.5 + 16 – 4

= 19.5 – 4

= 15.5 ≠ 74

Second option: + and –

= 14 + 96 × 24 – 16 ÷ 4

= 14 + 96 × 24 – 4

= 14 + 2304 – 4

= 2318 – 4

= 2314 ≠ 74

Third option: ÷ and ×

= 14 – 96 ÷ 24 + 16 × 4

= 14 – 4 + 16 × 4

= 14 – 4 + 64

= 78 – 4

= 74

Fourth option: + and ×

= 14 – 96 + 24 × 16 ÷ 4

= 14 – 96 + 24 × 4

= 14 – 96 + 96

= 14 ≠ 74

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

Q. 152 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols. If
+ means ×, – means +, × means ÷, ÷ means –, then what is the value of 50 + 10 – 50 × 10 ÷ 125 = ?

Option 1:
380

Option 2:
56

Option 3:
180

Option 4:
–125

Correct Answer:
380

Solution:

Given:

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

50 + 10 – 50 × 10 ÷ 125 = ?

Now, replace the given symbols –

= 50 × 10 + 50 ÷ 10 – 125

= 50 × 10 + 5 – 125

= 500 + 5 – 125

= 380

So, 380 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 153 **Directions:** Which of the following interchanges of signs would make the given equation correct?

100 + 100 × 50 – 2 ÷ 3 = 51

Option 1:

+ and ÷

Option 2:

+ and –

Option 3:

– and ×

Option 4:
÷ and ×

Correct Answer:
+ and ÷

Solution:
Given:
100 + 100 × 50 – 2 ÷ 3 = 51

On interchanging the mathematical signs as directed in the options –
First option: + and ÷
⇒ 100 ÷ 100 × 50 – 2 + 3 = 51
Solving the L.H.S. of the given equation –
= 1 × 50 – 2 + 3
= 50 – 2 + 3
= 53 – 2
= 51 = R.H.S.
Second option: + and –
⇒ 100 – 100 × 50 + 2 ÷ 3 = 51
Solving the L.H.S. of the given equation –
= 100 – 100 × 50 + 0.67 = 51
= 100 – 5000 + 0.67
= 100.67 – 5000
= –4899.33 ≠ 51
Third option: – and ×
⇒ 100 + 100 – 50 × 2 ÷ 3 = 51
Solving the L.H.S. of the given equation –
= 100 + 100 – 50 × 0.67

= 100 + 100 – 33.5
= 200 – 33.5
= 166.5 ≠ 51

Fourth option: ÷ and ×
⇒ 100 + 100 ÷ 50 – 2 × 3 = 51
Solving the L.H.S. of the given equation –
= 100 + 2 – 2 × 3
= 100 + 2 – 6
= 102 – 6
= 96 ≠ 51

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

Q. 154 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If × means –, – means ÷, + means ×, and ÷ means +, then what will be the value of the following expression?
16 × 8 ÷ 4 – 3 + 9 = ?

Option 1:
10

Option 2:
19

Option 3:
20

Option 4:
9

Correct Answer:
20

Solution:
Given:
× means –, – means ÷, + means ×, and ÷ means +.
16 × 8 ÷ 4 – 3 + 9 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 16 – 8 + 4 ÷ 3 × 9
= 16 – 8 + 12
= 28 – 8
= 20

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

Q. 155 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If – stands for division, + stands for multiplication, ÷ stands for subtraction, × stands for addition, which of the following equations is correct?

Option 1:
18 ÷ 3 × 2 + 8 – 6 = 10

Option 2:
18 – 3 + 2 × 8 ÷ 6 = 14

Option 3:
18 – 3 ÷ 2 × 8 + 6 = 17

Option 4:
18 × 3 + 2 ÷ 8 – 6 = 15

Correct Answer:
18 – 3 + 2 × 8 ÷ 6 = 14

Solution:
Given:
– stands for division, + stands for multiplication, ÷ stands for subtraction, × stands for addition.

Replace the mathematical signs in the equations and solve the equations one by one.

Let's check the given options –

First option: 18 ÷ 3 × 2 + 8 – 6 = 10

⇒ 18 – 3 + 2 × 8 ÷ 6 = 10

Solving L.H.S. of the equation –

= 18 – 3 + 2 × 1.33

= 18 – 3 + 2.66

= 20.66 – 3

= 17.66 ≠ 10

Second option: 18 – 3 + 2 × 8 ÷ 6 = 14

⇒ 18 ÷ 3 × 2 + 8 – 6 = 14

Solving L.H.S. of the equation –

= 6 × 2 + 8 – 6

= 12 + 8 – 6

= 20 – 6

= 14 = R.H.S.

Third option: 18 – 3 ÷ 2 × 8 + 6 = 17

⇒ 18 ÷ 3 – 2 + 8 × 6 = 17

Solving L.H.S. of the equation –

= 6 – 2 + 8 × 6

= 6 – 2 + 48

= 54 – 2

= 52 ≠ 17

Fourth option: 18 × 3 + 2 ÷ 8 – 6 = 15

⇒ 18 + 3 × 2 – 8 ÷ 6 = 15

Solving L.H.S. of the equation –

= 18 + 3 × 2 – 1.33

= 18 + 6 – 1.33
= 24 – 1.33
= 22.67 ≠ 15

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

Q. 156

Directions: In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + means ×, – means ÷, × means –, ÷ means +, then find the value of the following equation.
6 + 64 – 8 ÷ 45 × 8 = ?

Option 1:
85

Option 2:
76

Option 3:
87

Option 4:
75

Correct Answer:
85

Solution:
Given:
+ means ×, – means ÷, × means –, ÷ means +.
6 + 64 – 8 ÷ 45 × 8 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 6 × 64 ÷ 8 + 45 – 8
= 6 × 8 + 45 – 8
= 48 + 45 – 8
= 93 – 8
= 85

So, 85 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 157 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + means –, – means ×, × means ÷, ÷ means +, then,
2 ÷ 6 × 6 ÷ 2 = ?

Option 1:
1

Option 2:
0

Option 3:
10

Option 4:
5

Correct Answer:
5

Solution:
Given:
+ means –, – means ×, × means ÷, ÷ means +.
2 ÷ 6 × 6 ÷ 2 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 2 + 6 ÷ 6 + 2
= 2 + 1 + 2
= 5

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

Q. 158 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + means ÷, ÷ means –, – means ×, × means +, what will be the value of the following expression?
8 + 4 ÷ 3 × 5 – 9 = ?

Option 1:
44

Option 2:
53

Option 3:
62

Option 4:
64

Correct Answer:
44

Solution:
Given:
+ means ÷, ÷ means –, – means ×, × means +.
8 + 4 ÷ 3 × 5 – 9 = ?

Replace the signs in the given equation as per the instructions and solve the equation –

= 8 ÷ 4 – 3 + 5 × 9

= 2 – 3 + 5 × 9

= 2 – 3 + 45

= 47 – 3

= 44

So, 44 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 159

Directions: In the following question, you have to identify the correct response from the given premises stated according to the following signs.

If × means –, + means ×, ÷ means +, – means ÷, what will be the value of the given expression?

175 – 25 ÷ 5 + 20 × 3 + 10 = ?

Option 1:

77

Option 2:

160

Option 3:

240

Option 4:
2370

Correct Answer:
77

Solution:
Given:
× means –, + means ×, ÷ means +, – means ÷.
175 – 25 ÷ 5 + 20 × 3 + 10 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 175 ÷ 25 + 5 × 20 – 3 × 10
= 7 + 5 × 20 – 3 × 10
= 7 + 100 – 30
= 107 – 30
= 77

So, 77 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 160 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If – stands for division, + stands for multiplication, ÷ stands for subtraction, and × stands for addition, which one of the following equations is correct?

Option 1:
20 – 4 + 6 ÷ 9 × 4 = 25

Option 2:
20 + 6 – 4 × 9 ÷ 6 = 32

Option 3:
20 ÷ 9 × 9 – 4 + 6 = 33

Option 4:
20 × 4 – 6 ÷ 4 + 9 = 20

Correct Answer:
20 – 4 + 6 ÷ 9 × 4 = 25

Solution:
Given:
– stands for division, + stands for multiplication, ÷ stands for subtraction, and × stands for addition.

Replace the mathematical signs in the equations and solve the equations one by one.

Let's check the given options –

First option: 20 – 4 + 6 ÷ 9 × 4 = 25

⇒ 20 ÷ 4 × 6 – 9 + 4 = 25

Solving L.H.S. of the equation –

= 5 × 6 – 9 + 4

= 30 – 9 + 4

= 34 – 9

= 25 = R.H.S.

Second option: 20 + 6 – 4 × 9 ÷ 6 = 32

⇒ 20 × 6 ÷ 4 + 9 – 6 = 32

Solving L.H.S. of the equation –

= 20 × 1.5 + 9 – 6

= 30 + 9 – 6

= 39 – 6

= 33 ≠ 32

Third option: 20 ÷ 9 × 9 – 4 + 6 = 33

⇒ 20 – 9 + 9 ÷ 4 × 6 = 33

Solving L.H.S. of the equation –

= 20 – 9 + 2.25 × 6

= 20 – 9 + 13.5

= 33.5 – 9

= 24.5 ≠ 33

Fourth option: 20 × 4 – 6 ÷ 4 + 9 = 20

⇒ 20 + 4 ÷ 6 – 4 × 9 = 20

Solving L.H.S. of the equation –

= 20 + 0.67 – 4 × 9

= 20 + 0.67 – 36
= 20.67 – 36
= –15.33 ≠ 20

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

Q. 161

Directions: In the following question, you have to identify the correct response from the given premises stated according to the following symbols. In a certain code language, @ represents +, ⊕ represents –, a represents ÷, and Θ represents ×. Find out the answer to the following question.
8900 a 100 ⊕ 5 Θ 4 ⊕ 121 a 11 = ?

Option 1:
58

Option 2:
62

Option 3:
158

Option 4:
205

Correct Answer:
58

Solution:
Given:
@ represents +, ⊕ represents –, a represents ÷, and Θ represents ×.
8900 a 100 ⊕ 5 Θ 4 ⊕ 121 a 11 = ?

Replace the symbols in the given equation as per the instructions and solve the equation –
= 8900 ÷ 100 – 5 × 4 – 121 ÷ 11
= 89 – 5 × 4 – 11
= 89 – 20 – 11
= 58

So, 58 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 162 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If – stands for division, + stands for multiplication, ÷ stands for subtraction, and × stands for addition, which one of the following equations is correct?

Option 1:
100 + 5 – 10 × 250 ÷ 200 = 100

Option 2:
200 + 10 – 20 × 200 ÷ 100 = 150

Option 3:
50 × 5 ÷ 10 + 100 – 75 = 50

Option 4:
300 + 5 – 20 × 200 ÷ 100 = 200

Correct Answer:
100 + 5 – 10 × 250 ÷ 200 = 100

Solution:
Given:
– stands for division, + stands for multiplication, ÷ stands for subtraction, and × stands for addition.

Replace the mathematical signs in the equations and solve the equations one by one.

Let's check the given options –
First option: 100 + 5 – 10 × 250 ÷ 200 = 100
⇒ 100 × 5 ÷ 10 + 250 – 200 = 100
Solving L.H.S. of the equation –
= 100 × 0.5 + 250 – 200
= 50 + 250 – 200

= 300 – 200

= 100 = R.H.S.

Second option: 200 + 10 – 20 × 200 ÷ 100 = 150

⇒ 200 × 10 ÷ 20 + 200 – 100 = 150

Solving L.H.S. of the equation –

= 200 × 0.5 + 200 – 100

= 100 + 200 – 100

= 300 – 100

= 200 ≠ 150

Third option: 50 × 5 ÷ 10 + 100 – 75 = 50

⇒ 50 + 5 – 10 × 100 ÷ 75 = 50

Solving L.H.S. of the equation –

= 50 + 5 – 10 × 1.33

= 50 + 5 – 13.3

= 55 – 13.3

= 41.7 ≠ 50

Fourth option: 300 + 5 – 20 × 200 ÷ 100 = 200

⇒ 300 × 5 ÷ 20 + 200 – 100 = 200

Solving L.H.S. of the equation –

= 300 × 0.25 + 200 – 100

= 75 + 200 – 100

= 275 – 100

= 175 ≠ 200

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

Q. 163 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If – means ×, × means +, + means ÷, and ÷ means –, then what will be the value of 40 × 12 + 3 – 6 ÷ 60 = ?

Option 1:
4

Option 2:
7

Option 3:
16

Option 4:
44

Correct Answer:
4

Solution:
Given:
– means ×, × means +, + means ÷, and ÷ means –.
40 × 12 + 3 – 6 ÷ 60 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 40 + 12 ÷ 3 × 6 – 60
= 40 + 4 × 6 – 60
= 40 + 24 – 60
= 64 – 60
= 4

So, 4 is the required answer to the given equation. Hence, the **first option** is correct.

Q. 164 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If 25 + 5 ÷ 2 = 40, and 35 + 5 ÷ 2 = 60, then 45 + 5 ÷ 2 = ?

Option 1:
90

Option 2:
70

Option 3:
60

Option 4:
80

Correct Answer:
80

Solution:
Given:
25 + 5 ÷ 2 = 40, and 35 + 5 ÷ 2 = 60

Like, 25 + 5 ÷ 2 = 40→(25 – 5) × 2 = 20 × 2 = 40
And, 35 + 5 ÷ 2 = 60→(35 – 5) × 2 = 30 × 2 = 60
Similarly, 45 + 5 ÷ 2→(45 – 5) × 2 = 40 × 2 = 80

So, 80 is the required answer to the given equation. Hence, the **fourth option** is correct.

Q. 165 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + means ÷, ÷ means –, – means ×, and × means +, then 48 + 16 × 4 – 2 ÷ 8 = ?

Option 1:
3

Option 2:
6

Option 3:
112

Option 4:
–28

Correct Answer:
3

Solution:
Given:
+ means ÷, ÷ means –, – means ×, and × means +.
48 + 16 × 4 – 2 ÷ 8 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 48 ÷ 16 + 4 × 2 – 8
= 3 + 4 × 2 – 8
= 3 + 8 – 8
= 3

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

Q. 166 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following signs.
If + means minus, – means multiplication, ÷ means plus and × means division, then 15 – 3 + 10 × 5 ÷ 5 = ?

Option 1:
52

Option 2:
48

Option 3:
22

Option 4:
5

Correct Answer:
48

Solution:
Given:
+ means minus, – means multiplication, ÷ means plus and
× means division.
15 – 3 + 10 × 5 ÷ 5 = ?

Replace the signs in the given equation as per the instructions and solve the equation –
= 15 × 3 – 10 ÷ 5 + 5
= 15 × 3 – 2 + 5
= 45 – 2 + 5
= 50 – 2
= 48

So, 48 is the required answer to the given equation. Hence, the **second option** is correct.

Q. 167 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If ÷ stands for subtraction, – stands for addition,
× stands for division, and + stands for multiplication,
then which one of the following equations is correct?

Option 1:
35 ÷ 4 – 25 × 5 + 5 = 28

Option 2:
35 ÷ 4 – 25 × 5 + 5 = 61

Option 3:
35 ÷ 4 – 25 × 5 + 5 = 41

Option 4:

35 ÷ 4 – 25 × 5 + 5 = 56

Correct Answer:

35 ÷ 4 – 25 × 5 + 5 = 56

Solution:

Given:

÷ stands for subtraction, – stands for addition, × stands for division, and + stands for multiplication.

Let's check the options –

First option: 35 ÷ 4 – 25 × 5 + 5 = 28

⇒ 35 – 4 + 25 ÷ 5 × 5 = 28

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

= 35 – 4 + 5 × 5

= 35 – 4 + 25

= 60 – 4

= 56 ≠ 28

Second option: 35 ÷ 4 – 25 × 5 + 5 = 61

⇒ 35 – 4 + 25 ÷ 5 × 5 = 61

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

= 35 – 4 + 5 × 5

= 35 – 4 + 25

= 60 – 4

= 56 ≠ 61

Third option: 35 ÷ 4 – 25 × 5 + 5 = 41

⇒ 35 – 4 + 25 ÷ 5 × 5 = 41

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

= 35 – 4 + 5 × 5
= 35 – 4 + 25
= 60 – 4
= 56 ≠ 41
Fourth option: 35 ÷ 4 – 25 × 5 + 5 = 56
⇒ 35 – 4 + 25 ÷ 5 × 5 = 61
On solving the L.H.S. of the equation –
= 35 – 4 + 5 × 5
= 35 – 4 + 25
= 60 – 4
= 56 = R.H.S.

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

Q. 168 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
If + means ×, – means ÷, × means – and ÷ means +, then what will be the value of 16 ÷ 4 × 10 – 5 + 8 = ?

Option 1:
12

Option 2:
8

Option 3:
4

Option 4:
2

Correct Answer:
4

Solution:
Given:
+ means ×, – means ÷, × means – and ÷ means +.
16 ÷ 4 × 10 – 5 + 8 = ?

After interchanging the symbols according to the question, the equation becomes –
= 16 + 4 – 10 ÷ 5 × 8
= 16 + 4 – 2 × 8
= 16 + 4 – 16
= 4

So, 4 is the required answer to the given equation. Hence, the **third option** is correct.

Q. 169 **Directions:** Select the correct combination of mathematical signs to sequentially replace the & signs, and to balance the given equation.
[{(42 & 26) & (12 & 2)} & (4 & 5)] & 5 & 10

Option 1:

×, ÷, ×, ×, −, +, =

Option 2:

×, −, +, ×, ÷, ×, =

Option 3:

−, +, ×, ×, ÷, ×, =

Option 4:

−, +, ×, ÷, ×, ×, =

Correct Answer:

−, +, ×, ÷, ×, ×, =

Solution:

Given:

[{(42 & 26) & (12 & 2)} & (4 & 5)] & 5 & 10

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

First option: ×, ÷, ×, ×, −, +, =

⇒ [{(42 × 26) ÷ (12 × 2)} × (4 – 5)] + 5 = 10

Solving the L.H.S. of the equation –

= [{(1092) ÷ (24)} × (–1)] + 5

= [{45.5} × (–1)] + 5

= –45.5 + 5

= –40.5 ≠ 10

Second option: ×, −, +, ×, ÷, ×, =

⇒ [{(42 × 26) – (12 + 2)} × (4 ÷ 5)] × 5 = 10

Solving the L.H.S. of the equation –

= [{(1092) – (14)} × (0.8)] × 5

= [{1078} × (0.8)] × 5

= 862.4 × 5

= 4312 ≠ 10

Third option: –, +, ×, ×, ÷, ×, =

⇒ [{(42 – 26) + (12 × 2)} × (4 ÷ 5)] × 5 = 10

Solving the L.H.S. of the equation –

= [{16 + 24} × (0.8)] × 5

= [40 × 0.8] × 5

= 32 × 5

= 160 ≠ 10

Fourth option: –, +, ×, ÷, ×, ×, =

⇒ [{(42 – 26) + (12 × 2)} ÷ (4 × 5)] × 5 = 10

Solving the L.H.S. of the equation –

= [{16 + 24} ÷ (20)] × 5

= [40 ÷ 20] × 5

= 2 × 5

= 10

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

Q. 170 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols:
Select the set of symbols that can be fitted correctly in the equation.
5....3....8....4....2 = 21

Option 1:
+, ×, +, ÷

Option 2:
×, +, –, ÷

Option 3:
–, ×, +, ÷

Option 4:
+, ×, –, ÷

Correct Answer:
×, +, –, ÷

Solution:
Given:
5....3....8....4....2 = 21

Let's check the options –

First option: +, ×, +, ÷

⇒ 5 + 3 × 8 + 4 ÷ 2 = 21

On solving the L.H.S. of the equation, we get –

= 5 + 3 × 8 + 2

= 5 + 24 + 2

= 31 ≠ 21

Second option: ×, +, –, ÷

⇒ 5 × 3 + 8 – 4 ÷ 2 = 21

On solving the L.H.S. of the equation, we get –

= 5 × 3 + 8 – 2

= 15 + 8 – 2

= 23 – 2

= 21

Third option: –, ×, +, ÷

⇒ 5 – 3 × 8 + 4 ÷ 2 = 21

On solving the L.H.S. of the equation, we get –

= 5 – 3 × 8 + 2

= 5 – 24 + 2

= –17 ≠ 21

Fourth option: +, ×, –, ÷

⇒ 5 + 3 × 8 – 4 ÷ 2 = 21

On solving the L.H.S. of the equation, we get –

= 5 + 3 × 8 – 2

= 5 + 24 – 2

= 27 ≠ 21

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

Q. 171 **Directions:** In the following question you have to identify the correct response from the given premises stated according to the following symbols.
Select the set of symbols that can be fitted correctly in the equation.
4....3....4 = 48

Option 1:
+, +

Option 2:
+, –

Option 3:
×, +

Option 4:
×, ×

Correct Answer:
×, ×

Solution:
Given:
4....3....4 = 48

Let's check the options –

First option: +, +

$\Rightarrow 4 + 3 + 4 = 48$

On solving the L.H.S. of the equation, we get –

$= 4 + 3 + 4$

$= 11 \neq 48$

Second option: +, –

$\Rightarrow 4 + 3 - 4 = 48$

On solving the L.H.S. of the equation, we get –

$= 4 + 3 - 4$

$= 3 \neq 48$

Third option: ×, +

$\Rightarrow 4 \times 3 + 4 = 48$

On solving the L.H.S. of the equation, we get –

$= 4 \times 3 + 4$

$= 12 + 4$

$= 16 \neq 48$

Fourth option: ×, ×

$\Rightarrow 4 \times 3 \times 4 = 48$

On solving the L.H.S. of the equation, we get –

$= 4 \times 3 \times 4$

$= 48$

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

Q. 172 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
35 * 5 * 7 * 2 * 19 = 42

Option 1:
×, ÷, –, +

Option 2:
÷, ×, +, +

Option 3:
+, –, +, –

Option 4:
÷, ×, –, –

Correct Answer:
×, ÷, –, +

Solution:
Given:
35 * 5 * 7 * 2 * 19 = 42

Replace * with the mathematical signs and solve the equations one by one using BODMAS.
Let's check the given options –

First option: ×, ÷, –, +

⇒ 35 × 5 ÷ 7 – 2 + 19 = 42

Solving the L.H.S. of the equation –

= 25 – 2 + 19

= 42

Second option: ÷, ×, +, +

⇒ 35 ÷ 5 × 7 + 2 + 19 = 42

Solving the L.H.S. of the equation –

= 49 + 2 + 19

= 70 ≠ 42

Third option: +, –, +, –

⇒ 35 + 5 – 7 + 2 – 19 = 42

Solving the L.H.S. of the equation –

= 40 – 7 + 2 – 19

= 16 ≠ 42

Fourth option: ÷, ×, –, –

⇒ 35 ÷ 5 × 7 – 2 – 19 = 42

Solving the L.H.S. of the equation –

= 49 – 2 – 19

= 28 ≠ 42

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

Q. 173 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
14 * 2 * 4 * 6 * 4

Option 1:
×, ÷, >, ×

Option 2:
÷, ×, >, ×

Option 3:
÷, +, =, ×

Option 4:
÷, +, >, ×

Correct Answer:
÷, ×, >, ×

Solution:
Given:
14 * 2 * 4 * 6 * 4

Replace * with the mathematical signs and solve the equations one by one.
Let's check the options –

First option: ×, ÷, >, ×

⇒ 14 × 2 ÷ 4 > 6 × 4

⇒ 14 × 0.5 > 24

⇒ 7 > 24

This is not true because 7 is not greater than 24.

Second option: ÷, ×, >, ×

⇒ 14 ÷ 2 × 4 > 6 × 4

⇒ 7 × 4 > 24

⇒ 28 > 24

This is true because 28 is greater than 24.

Third option: ÷, +, =, ×

⇒ 14 ÷ 2 + 4 > 6 × 4

⇒ 7 + 4 > 24

⇒ 11 = 24

But 11 ≠ 24, so this is not true.

Fourth option: ÷, +, >, ×

⇒ 14 ÷ 2 + 4 > 6 × 4

⇒ 7 + 4 > 24

⇒ 11 > 24

This is not true because 11 is not greater than 24.

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

Q. 174 **Directions:** In the following question, you have to identify the correct response from the given premises stated according to the following symbols.
32 * 2 * 8 * 14 * 4

Option 1:
×, +, =, ÷

Option 2:
+, +, =, ×

Option 3:
×, –, =, ×

Option 4:
+, ×, =, ×

Correct Answer:
×, –, =, ×

Solution:
Given:
32 * 2 * 8 * 14 * 4

Replace * with the mathematical signs and solve the equations one by one.
Let's check the options –

First option: ×, +, =, ÷

⇒ 32 × 2 + 8 = 14 ÷ 4

L.H.S.→32 × 2 + 8 = 64 + 8 = 72

R.H.S.→14 ÷ 4 = 3.5

L.H.S. ≠ R.H.S.

Second option: +, +, =, ×

⇒ 32 + 2 + 8 = 14 × 4

L.H.S.→32 + 2 + 8 = 42

R.H.S.→14 × 4 = 56

L.H.S. ≠ R.H.S.

Third option: ×, –, =, ×

⇒ 32 × 2 – 8 = 14 × 4

L.H.S.→32 × 2 – 8 = 64 – 8 = 56

R.H.S.→14 × 4 = 56

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

Fourth option: +, ×, =, ×

⇒ 32 + 2 × 8 = 14 × 4

L.H.S.→32 + 2 × 8 = 32 + 16 = 48

R.H.S.→14 × 4 = 56

L.H.S. ≠ R.H.S.

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

Q. 175 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
12 * 24 * 4 * 2 * 60

Option 1:
+, ×, ÷, =

Option 2:
−, ×, +, =

Option 3:
+, ×, −, =

Option 4:
+, ÷, ×, =

Correct Answer:
+, ×, ÷, =

Solution:
Given:
12 * 24 * 4 * 2 * 60

Let's check the given options –
First option: +, ×, ÷, =
⇒ 12 + 24 × 4 ÷ 2 = 60

Solving the L.H.S. of the equation –

= 12 + 24 × 4 ÷ 2

= 12 + 24 × 2

= 12 + 48

= 60

Second option: −, ×, +, =

⇒ 12 – 24 × 4 + 2 = 60

Solving the L.H.S. of the equation –

= 12 – 96 + 2

= 14 – 96

= –82 ≠ 60

Third option: +, ×, −, =

⇒ 12 + 24 × 4 – 2 = 60

Solving the L.H.S. of the equation –

= 12 + 96 – 2

= 108 – 2

= 106 ≠ 60

Fourth option: +, ÷, ×, =

⇒ 12 + 24 ÷ 4 × 2 = 60

Solving the L.H.S. of the equation –

= 12 + 6 × 2

= 12 + 12

= 24 ≠ 60

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

Q. 176 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
65 * 45 * 25 * 5 * 35 * 60

Option 1:
−, +, −, +, =

Option 2:
+, ×, +, −, =

Option 3:
+, −, +, −, =

Option 4:
−, +, ÷, +, =

Correct Answer:
−, +, ÷, +, =

Solution:
Given:
65 * 45 * 25 * 5 * 35 * 60

Let's check the given options –
First option: −, +, −, +, =
⇒ 65 − 45 + 25 − 5 + 35 = 60

Solving the L.H.S. of the equation –

= 125 − 45 − 5

= 75 ≠ 60

Second option: +, ×, +, −, =

⇒ 65 + 45 × 25 + 5 − 35 = 60

Solving the L.H.S. of the equation –

= 65 + 1125 + 5 − 35

= 1195 − 35

= 1160 ≠ 60

Third option: +, −, +, −, =

⇒ 65 + 45 − 25 + 5 − 35 = 60

Solving the L.H.S. of the equation –

= 115 − 25 − 35

= 55 ≠ 60

Fourth option: −, +, ÷, +, =

⇒ 65 − 45 + 25 ÷ 5 + 35 = 60

Solving the L.H.S. of the equation –

= 65 − 45 + 5 + 35

= 105 − 45

= 60

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

Q. 177 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
99 * 33 * 66 * 22 * 44 * 50

Option 1:
÷, +, ×, +, =

Option 2:
+, −, ÷, −, =

Option 3:
÷, +, ÷, +, =

Option 4:
÷, −, +, ×, =

Correct Answer:
÷, +, ÷, +, =

Solution:
Given:
99 * 33 * 66 * 22 * 44 * 50

Let's check the given options –
First Option: ÷, +, ×, +, =
⇒ 99 ÷ 33 + 66 × 22 + 44 = 50

Solving the L.H.S. of the equation –
= 3 + 66 × 22 + 44
= 3 + 1452 + 44
= 1499 ≠ 50

Second Option: +, −, ÷, −, =
⇒ 99 + 33 − 66 ÷ 22 − 44 = 50
Solving the L.H.S. of the equation –
= 99 + 33 − 3 − 44
= 132 − 3 − 44
= 85 ≠ 50

Third Option: ÷, +, ÷, +, =
⇒ 99 ÷ 33 + 66 ÷ 22 + 44 = 50
Solving the L.H.S. of the equation –
= 3 + 3 + 44
= 50

Fourth Option: ÷, −, +, ×, =
⇒ 99 ÷ 33 − 66 + 22 × 44 = 50
Solving the L.H.S. of the equation –
= 3 − 66 + 22 × 44
= 3 − 66 + 968
= 905 ≠ 50

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

Q. 178 **Directions:** If 7 @ 3 = 343 and 9 @ 3 = 729, then 6 @ 3 = ?

Option 1:
144

Option 2:
216

Option 3:
108

Option 4:
36

Correct Answer:
216

Solution:
Given:
7 @ 3 = 343 and 9 @ 3 = 729

Here, the pattern followed is –
7 @ 3→$(7)^3$ = 343
9 @ 3→$(9)^3$ = 729
Similarly, follow the same pattern for 6 @ 3 –
6 @ 3→$(6)^3$ = 216

So, 216 is the required answer. Hence, the **second option** is correct.

Q. 179 **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:
+, ×, ÷, −

Option 2:
×, −, ÷, +

Option 3:
+, −, ÷, ×

Option 4:
÷, ×, −, +

Correct Answer:
×, −, ÷, +

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: +, ×, ÷, –

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

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. 180 **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:
÷, −, ×, +

Option 2:
÷, ×, +, −

Option 3:
+, ×, −, ÷

Option 4:
×, −, ÷, +

Correct Answer:
×, −, ÷, +

Solution:
Given:
21 * 3 * 36 * 2 * 23 = 68

Let's check the given options –
First option: ÷, −, ×, +
⇒ 21 ÷ 3 − 36 × 2 + 23 = 68

Solving the L.H.S. of the equation –

= 7 − 36 × 2 + 23

= 7 − 72 + 23

= −42 ≠ 68

Second option: ÷, ×, +, −

⇒ 21 ÷ 3 × 36 + 2 − 23 = 68

Solving the L.H.S. of the equation –

= 7 × 36 + 2 − 23

= 252 + 2 − 23

= 231 ≠ 68

Third option: +, ×, −, ÷

⇒ 21 + 3 × 36 − 2 ÷ 23 = 68

Solving the L.H.S. of the equation –

= 21 + 3 × 36 − 0.09

= 21 + 108 − 0.09

= 128.91 ≠ 68

Fourth option: ×, −, ÷, +

⇒ 21 × 3 − 36 ÷ 2 + 23 = 68

Solving the L.H.S. of the equation –

= 21 × 3 − 18 + 23

= 63 − 18 + 23

= 68

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

Q. 181 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
268 * 4 * 8 * 5 * 14 = 41

Option 1:
+, ×, −, ÷

Option 2:
×, ÷, +, −

Option 3:
÷, ×, +, −

Option 4:
÷, −, ×, +

Correct Answer:
÷, −, ×, +

Solution:
Given:
268 * 4 * 8 * 5 * 14 = 41

Let's check the options –
First option: +, ×, −, ÷
⇒ 268 + 4 × 8 − 5 ÷ 14 = 41

Solving the L.H.S. of the equation –

$\Rightarrow 268 + 4 \times 8 - 0.36$

$\Rightarrow 268 + 32 - 0.36$

$\Rightarrow 299.64 \neq 41$

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

$\Rightarrow 268 \times 4 \div 8 + 5 - 14 = 41$

Solving the L.H.S. of the equation –

$\Rightarrow 268 \times 0.5 + 5 - 14$

$\Rightarrow 134 + 5 - 14$

$\Rightarrow 125 \neq 41$

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

$\Rightarrow 268 \div 4 \times 8 + 5 - 14 = 41$

Solving the L.H.S. of the equation –

$\Rightarrow 67 \times 8 + 5 - 14$

$\Rightarrow 536 + 5 - 14$

$\Rightarrow 527 \neq 41$

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

$\Rightarrow 268 \div 4 - 8 \times 5 + 14 = 41$

Solving the L.H.S. of the equation –

$\Rightarrow 67 - 8 \times 5 + 14$

$\Rightarrow 67 - 40 + 14$

$\Rightarrow 41$

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

Q. 182 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
11 * 7 * 345 * 5 * 31 = 115

Option 1:
+, ×, ÷, −

Option 2:
×, +, ÷, −

Option 3:
÷, ×, +, −

Option 4:
÷, −, +, ×

Correct Answer:
×, +, ÷, −

Solution:
Given:
11 * 7 * 345 * 5 * 31 = 115

Let's check the options –
First option: +, ×, ÷, −
⇒ 11 + 7 × 345 ÷ 5 − 31 = 115

Solving the L.H.S. of the equation –

$\Rightarrow 11 + 7 \times 69 - 31$

$\Rightarrow 11 + 483 - 31$

$\Rightarrow 463 \neq 115$

Second option: ×, +, ÷, −

$\Rightarrow 11 \times 7 + 345 \div 5 - 31 = 115$

Solving the L.H.S. of the equation –

$\Rightarrow 11 \times 7 + 69 - 31$

$\Rightarrow 77 + 69 - 31$

$\Rightarrow 115$

Third option: ÷, ×, +, −

$\Rightarrow 11 \div 7 \times 345 + 5 - 31 = 115$

Solving the L.H.S. of the equation –

$\Rightarrow 1.57 \times 345 + 5 - 31$

$\Rightarrow 541.65 + 5 - 31$

$\Rightarrow 515.65 \neq 115$

Fourth option: ÷, −, +, ×

$\Rightarrow 11 \div 7 - 345 + 5 \times 31 = 115$

Solving the L.H.S. of the equation –

$\Rightarrow 1.57 - 345 + 5 \times 31$

$\Rightarrow 1.57 - 345 + 155$

$\Rightarrow -188.43 \neq 115$

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

Q. 183 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
234 * 345 * 456 * 567 * 678 * 12

Option 1:
−, +, +, −, =

Option 2:
÷, −, +, −, =

Option 3:
+, ×, +, −, =

Option 4:
+, −, +, −, =

Correct Answer:
+, −, +, −, =

Solution:
Given:
234 * 345 * 456 * 567 * 678 * 12

Let's check the options –
First option: −, +, +, −, =
⇒ 234 − 345 + 456 + 567 − 678 = 12

Solving the L.H.S. of the equation –

$\Rightarrow 1257 - 345 - 678$

$\Rightarrow 234 \neq 12$

Second option: ÷, −, +, −, =

$\Rightarrow 234 \div 345 - 456 + 567 - 678 = 12$

Solving the L.H.S. of the equation –

$\Rightarrow 0.68 - 456 + 567 - 678$

$\Rightarrow 567.68 - 456 - 678$

$\Rightarrow -566.32 \neq 12$

Third option: +, ×, +, −, =

$\Rightarrow 234 + 345 \times 456 + 567 - 678 = 12$

Solving the L.H.S. of the equation –

$\Rightarrow 234 + 157320 + 567 - 678$

$\Rightarrow 158121 - 678$

$\Rightarrow 157443 \neq 12$

Fourth option: +, −, +, −, =

$\Rightarrow 234 + 345 - 456 + 567 - 678 = 12$

Solving the L.H.S. of the equation –

$\Rightarrow 1146 - 456 - 678$

$\Rightarrow 12$

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

Q. 184 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
(626 * 2) * (11 * 9) * 69 * 240 * 103

Option 1:
÷, +, ×, =, +, +

Option 2:
+, ×, =, ÷, +, −

Option 3:
÷, −, ×, =, −, ×

Option 4:
+, ×, =, −, ÷, +

Correct Answer:
÷, +, ×, =, +, +

Solution:
Given:
(626 * 2) * (11 * 9) * 69 * 240 * 103

Replace * with the mathematical signs and solve the equations one by one using BODMAS.
Let's check the given options –

First option: ÷, +, ×, =, +, +

⇒ (626 ÷ 2) + (11 × 9) = 69 + 240 + 103

L.H.S. = (626 ÷ 2) + (11 × 9)

= 313 + 99 = 412

R.H.S. = 69 + 240 + 103

= 412

Here, L.H.S = R.H.S

Second option: +, ×, =, ÷, +, −

⇒ (626 + 2) × 11 = 9 ÷ 69 + 240 − 103

L.H.S. = (626 + 2) × 11

= 628 × 11

= 6908

R.H.S. = 9 ÷ 69 + 240 − 103

= 0.13 + 240 − 103

= 137.13

Here, L.H.S ≠ R.H.S

Third option: ÷, −, ×, =, −, ×

⇒ (626 ÷ 2) − (11 × 9) = 69 − 240 × 103

L.H.S = (626 ÷ 2) − (11 × 9)

= 313 − 99

= 214

R.H.S = 69 − 240 × 103

= 69 − 24720

= −24651

Here, L.H.S ≠ R.H.S

Fourth option: +, ×, =, −, ÷, +

⇒ (626 + 2) × 11 = 9 − 69 ÷ 240 + 103

L.H.S = (626 + 2) × 11

= 628 × 11

= 6908
R.H.S = 9 − 69 ÷ 240 + 103
= 9 − 0.29 + 103
= 111.71
Here, L.H.S ≠ R.H.S

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

Q. 185 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
(130 * 4) * 21 * 485 * (28 * 2)

Option 1:
+, −, =, −, ×

Option 2:
÷, +, =, −, ×

Option 3:
×, −, =, −, ÷

Option 4:
×, −, =, +, ÷

Correct Answer:

×, −, =, +, ÷

Solution:

Given:

(130 * 4) * 21 * 485 * (28 * 2)

Let's check the options −

First option: +, −, =, −, ×

⇒ (130 + 4) − 21 = 485 − (28 × 2)

L.H.S. = (130 + 4) − 21 = 134 − 21 = 113

R.H.S. = 485 − (28 × 2) = 485 − 56 = 429

L.H.S. ≠ R.H.S.

Second option: ÷, +, =, −, ×

⇒ (130 ÷ 4) + 21 = 485 − (28 × 2)

L.H.S. = (130 ÷ 4) + 21 = 32.5 + 21 = 53.5

R.H.S. = 485 − (28 × 2) = 485 − 56 = 429

L.H.S. ≠ R.H.S.

Third option: ×, −, =, −, ÷

⇒ (130 × 4) − 21 = 485 − (28 ÷ 2)

L.H.S. = (130 × 4) − 21 = 520 − 21 = 499

R.H.S. = 485 − (28 ÷ 2) = 485 − 14 = 471

L.H.S. ≠ R.H.S.

Fourth option: ×, −, =, +, ÷

⇒ (130 × 4) − 21 = 485 + (28 ÷ 2)

L.H.S. = (130 × 4) − 21 = 520 − 21 = 499

R.H.S. = 485 + (28 ÷ 2) = 485 + 14 = 499

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

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

Q. 186 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
54 * 6 * 72 * 8 * 3 * 15

Option 1:
÷, +, ÷, −, =

Option 2:
÷, −, −, +, =

Option 3:
+, ÷, ×, +, =

Option 4:
×, −, −, +, =

Correct Answer:
÷, +, ÷, −, =

Solution:
Given:
54 * 6 * 72 * 8 * 3 * 15

Let's check the given options –
First option: ÷, +, ÷, −, =
⇒ 54 ÷ 6 + 72 ÷ 8 – 3 = 15

Solving the L.H.S. of the equation –

= 9 + 9 – 3

= 18 – 3

= 15

Second option: ÷, –, –, +, =

⇒ 54 ÷ 6 – 72 – 8 + 3 = 15

Solving the L.H.S. of the equation –

= 9 – 72 – 8 + 3

= 12 – 72 – 8

= –68 ≠ 15

Third option: +, ÷, ×, +, =

⇒ 54 + 6 ÷ 72 × 8 + 3 = 15

Solving the L.H.S. of the equation –

= 54 + 0.67 + 3

= 57.67 ≠ 15

Fourth option: ×, –, –, +, =

⇒ 54 × 6 – 72 – 8 + 3 = 15

Solving the L.H.S. of the equation –

= 324 – 72 – 8 + 3

= 327 – 72 – 8

= 247 ≠ 15

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

Q. 187 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
355 * (12 * 3) * 289 * (186 * 6) * 71

Option 1:
+, ×, =, +, ÷, +

Option 2:
÷, –, =, ÷, ×, –

Option 3:
×, +, –, =, ÷, +

Option 4:
×, –, =, +, ÷, +

Correct Answer:
+, ×, =, +, ÷, +

Solution:
Given:
355 * (12 * 3) * 289 * (186 * 6) * 71

Let's check the given options –
First option: +, ×, =, +, ÷, +
⇒ 355 + (12 × 3) = 289 + (186 ÷ 6) + 71

Solving the L.H.S. of the equation –

= 355 + 36 = 391

Solving the R.H.S. of the equation –

= 289 + 31 + 71 = 391

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

Second option: ÷, –, =, ÷, ×, –

⇒ 355 ÷ (12 – 3) = 289 ÷ (186 × 6) – 71

Solving the L.H.S. of the equation –

= 355 ÷ 9 = 39.44

Solving the R.H.S. of the equation –

= 289 ÷ 1116 – 71

= 0.259 – 71 = –70.741

L.H.S. ≠ R.H.S.

Third option: ×, +, –, =, ÷, +

⇒ 355 × (12 + 3) – 289 = (186 ÷ 6) + 71

Solving the L.H.S. of the equation –

= 355 × 15 – 289

= 5325 – 289 = 5036

Solving the R.H.S. of the equation –

= 31 + 71 = 102

L.H.S. ≠ R.H.S.

Fourth option: ×, –, =, +, ÷, +

⇒ 355 × (12 – 3) = 289 + (186 ÷ 6) + 71

Solving the L.H.S. of the equation –

= 355 × 9 = 3195

Solving the R.H.S. of the equation –

= 289 + 31 + 71 = 391

L.H.S. ≠ R.H.S.

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

Q. 188 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
$(\sqrt{729 * 9})$ * 67 * 81 * (4 * 6) * 19

Option 1:
+, –, +, ÷, =, ×

Option 2:
×, +, –, +, ×, =

Option 3:
+, –, ÷, =, –, ×

Option 4:
÷, +, =, –, ×, +

Correct Answer:
÷, +, =, –, ×, +

Solution:
Given:
$(\sqrt{729 * 9})$ * 67 * 81 * (4 * 6) * 19

Let's check the given options –

First option: +, –, +, ÷, =, ×

⇒ ($\sqrt{729 + 9}$) – 67 + 81 ÷ 4 = 6 × 19

Solving the L.H.S. of the equation –

= ($\sqrt{738}$) – 67 + 81 ÷ 4

= 27.1 – 67 + 81 ÷ 4

= 27.1 – 67 + 20.25

= –19.65

Solving the R.H.S. of the equation –

= 6 × 19 = 114

L.H.S. ≠ R.H.S.

Second option: ×, +, –, +, ×, =

⇒ ($\sqrt{729 \times 9}$) + 67 – 81 + (4 × 6) = 19

Solving the L.H.S. of the equation –

= ($\sqrt{6561}$) + 67 – 81 + 24

= 81 + 67 – 81 + 24

= 91

L.H.S. ≠ R.H.S.

Third option: +, –, ÷, =, –, ×

⇒ ($\sqrt{729 + 9}$) – 67 ÷ 81 = (4 – 6) × 19

Solving the L.H.S. of the equation –

= ($\sqrt{738}$) – 67 ÷ 81

= 27.1 – 67 ÷ 81

= 27.1 – 0.83

= 26.27

Solving the R.H.S. of the equation –

= –2 × 19 = –38

L.H.S. ≠ R.H.S.

Fourth option: ÷, +, =, –, ×, +

$\Rightarrow (\sqrt{729 \div 9}) + 67 = 81 - (4 \times 6) + 19$

Solving the L.H.S. of the equation –

$= (\sqrt{81}) + 67$

$= 9 + 67$

$= 76$

Solving the R.H.S. of the equation –

$= 81 - 24 + 19 = 76$

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

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

Q. 189 **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:

+, −, =, ÷, +

Option 2:

×, =, −, ÷, +

Option 3:

+, ×, =, ÷, +

Option 4:

÷, −, =, −, ×

Correct Answer:

÷, −, =, −, ×

Solution:

Given:

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

Let's check the given options –

First option: +, −, =, ÷, +

⇒ (440 + 11) − 85 = 57 ÷ (34 + 3)

L.H.S. = 451 − 85 = 366

R.H.S. = 57 ÷ 37 = 1.54

L.H.S. ≠ R.H.S.

Second option: ×, =, −, ÷, +

⇒ (440 × 11) = 85 − 57 ÷ (34 + 3)

L.H.S. = (440 × 11) = 4840

R.H.S. = 85 − 57 ÷ 37 = 85 − 1.54 = 83.46

L.H.S. ≠ R.H.S.

Third option: +, ×, =, ÷, +

⇒ (440 + 11) × 85 = 57 ÷ (34 + 3)

L.H.S. = 451 × 85 = 38335

R.H.S. = 57 ÷ 37 = 1.54

L.H.S. ≠ R.H.S.

Fourth option: ÷, −, =, −, ×

⇒ (440 ÷ 11) − 85 = 57 − (34 × 3)

L.H.S. = 40 − 85 = –45
R.H.S. = 57 − 102 = –45
L.H.S. = R.H.S.

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

Q. 190 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
213 * 67 * 119 * (248 * 31) * 169

Option 1:
–, ÷, =, –, ×

Option 2:
+, –, +, ÷, =

Option 3:
×, –, =, +, ÷

Option 4:
+, –, =, –, ×

Correct Answer:
+, –, +, ÷, =

Solution:

Given:

213 * 67 * 119 * (248 * 31) * 169

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

Let's check the given options –

First option: −, ÷, =, −, ×

⇒ 213 – 67 ÷ 119 = (248 – 31) × 169

Solving the L.H.S. of the equation –

= 213 – 0.56 = 212.44

Solving the R.H.S. of the equation –

= (248 – 31) × 169

= 217 × 169 = 36673

L.H.S. ≠ R.H.S.

Second option: +, −, +, ÷, =

⇒ 213 + 67 – 119 + (248 ÷ 31) = 169

Solving the L.H.S. of the equation –

= 213 + 67 – 119 + 8

= 288 – 119

= 169 = R.H.S.

Third option: ×, −, =, +, ÷

⇒ 213 × 67 – 119 = (248 + 31) ÷ 169

Solving the L.H.S. of the equation –

= 14271 – 119

= 14152

Solving the R.H.S. of the equation –

= 279 ÷ 169 = 1.65

L.H.S. ≠ R.H.S.

Fourth option: +, −, =, −, ×

⇒ 213 + 67 – 119 = (248 – 31) × 169
Solving the L.H.S. of the equation –
= 280 – 119 = 161
Solving the R.H.S. of the equation –
= 217 × 169 = 36673
L.H.S. ≠ R.H.S.

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

Q. 191 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
467 * 231 * 123 * 789 * 345 * 131

Option 1:
+, –, +, +, =

Option 2:
+, –, –, +, =

Option 3:
+, –, ×, +, =

Option 4:
×, –, –, +, =

Correct Answer:

+, −, −, +, =

Solution:

Given:

467 * 231 * 123 * 789 * 345 * 131

Let's check the given options –

First option: +, –, +, +, =

⇒ 467 + 231 – 123 + 789 + 345 = 131

Solving the L.H.S. of the equation –

= 1832 – 123

= 1709 ≠ 131

Second option: +, −, −, +, =

⇒ 467 + 231 − 123 − 789 + 345 = 131

Solving the L.H.S. of the equation –

= 1043 − 123 − 789

= 131

Third option: +, −, ×, +, =

⇒ 467 + 231 − 123 × 789 + 345 = 131

Solving the L.H.S. of the equation –

= 467 + 231 − 97047 + 345

= −96004 ≠ 131

Fourth option: ×, −, −, +, =

⇒ 467 × 231 − 123 − 789 + 345 = 131

Solving the L.H.S. of the equation –

= 107877 − 123 − 789 + 345

= 107310 ≠ 131

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

Q. 192 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
121 * 11 * 99 * 11 * 77 * 79

Option 1:
×, −, ÷, +, =

Option 2:
÷, −, ÷, ×, =

Option 3:
÷, −, ×, +, =

Option 4:
÷, −, ÷, +, =

Correct Answer:
÷, −, ÷, +, =

Solution:
Given:
121 * 11 * 99 * 11 * 77 * 79

Let's check the given options –

First option: ×, −, ÷, +, =

⇒ 121 × 11 − 99 ÷ 11 + 77 = 79

Solving the L.H.S. of the equation –

= 1331 − 9 + 77

= 1399 ≠ 79

Second option: ÷, −, ÷, ×, =

⇒ 121 ÷ 11 − 99 ÷ 11 × 77 = 79

Solving the L.H.S. of the equation –

= 11 − 9 × 77

= 11 − 693

= –682 ≠ 79

Third option: ÷, −, ×, +, =

⇒ 121 ÷ 11 − 99 × 11 + 77 = 79

Solving the L.H.S. of the equation –

= 11 − 1089 + 77

= 1001 ≠ 79

Fourth option: ÷, −, ÷, +, =

⇒ 121 ÷ 11 − 99 ÷ 11 + 77 = 79

Solving the L.H.S. of the equation –

= 11 − 9 + 77

= 79

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

Q. 193 **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:
÷, −, =, −, ×, −

Option 2:
+, ÷, +, =, −, ×

Option 3:
×, +, =, +, ×, ÷

Option 4:
×, +, =, −, ÷, +

Correct Answer:
×, +, =, −, ÷, +

Solution:
Given:
(44 * 3) * 9 * 89 * (174 * 29) * 58

Let's check the given options –
First option: ÷, −, =, −, ×, −
⇒ (44 ÷ 3) – 9 = 89 – (174 × 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. ≠ R.H.S.

Second option: +, ÷, +, =, −, ×

⇒ (44 + 3) ÷ 9 + 89 = (174 – 29) × 58

Solving the L.H.S. of the equation –

= 47 ÷ 9 + 89

= 5.22 + 89

= 94.22

Solving the R.H.S. of the equation –

= 145 × 58 = 8410

L.H.S. ≠ R.H.S.

Third option: ×, +, =, +, ×, ÷

⇒ (44 × 3) + 9 = 89 + (174 × 29) ÷ 58

Solving the L.H.S. of the equation –

= 132 + 9 = 141

Solving the R.H.S. of the equation –

= 89 + 5046 ÷ 58

= 89 + 87 = 176

L.H.S. ≠ R.H.S.

Fourth option: ×, +, =, −, ÷, +

⇒ (44 × 3) + 9 = 89 – (174 ÷ 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. 194 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
88 * 44 * 22 * 66 * 99 * 251

Option 1:
+, ÷, –, ×, =

Option 2:
÷, +, –, ×, =

Option 3:
+, +, –, ×, =

Option 4:
–, ÷, +, +, =

Correct Answer:
–, ÷, +, +, =

Solution:

Given:
88 * 44 * 22 * 66 * 99 * 251

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –
First option: +, ÷, –, ×, =
⇒ 88 + 44 ÷ 22 – 66 × 99 = 251
Solving the L.H.S of the equation –
= 88 + 2 – 6534
= –6444 ≠ 251
Second option: ÷, +, –, ×, =
⇒ 88 ÷ 44 + 22 – 66 × 99 = 251
Solving the L.H.S of the equation –
= 2 + 22 – 6534
= –6510 ≠ 251
Third option: +, +, –, ×, =
⇒ 88 + 44 + 22 – 66 × 99 = 251
Solving the L.H.S of the equation –
= 154 – 6534
= –6380 ≠ 251
Fourth option: –, ÷, +, +, =
⇒ 88 – 44 ÷ 22 + 66 + 99 = 251
Solving the L.H.S of the equation –
= 88 – 2 + 165
= 251 = R.H.S.

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

Q. 195 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
221 * 17 * 3 * 60 * 7 * 10

Option 1:
÷, –, +, =, ×

Option 2:
+, =, ×, ÷, –

Option 3:
÷, ×, +, =, +

Option 4:
+, =, ×, +, ×

Correct Answer:
÷, –, +, =, ×

Solution:
Given:
221 * 17 * 3 * 60 * 7 * 10

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –

First option: ÷, –, +, =, ×

⇒ 221 ÷ 17 – 3 + 60 = 7 × 10

Solving the L.H.S. and R.H.S. of the equation –

⇒ 13 – 3 + 60 = 70

⇒ 70 = 70

Second option: +, =, ×, ÷, –

⇒ 221 + 17 = 3 × 60 ÷ 7 – 10

Solving the L.H.S. and R.H.S. of the equation –

⇒ 238 = 25.71 – 10

⇒ 238 ≠ 15.71

Third option: ÷, ×, +, =, +

⇒ 221 ÷ 17 × 3 + 60 = 7 + 10

Solving the L.H.S. and R.H.S. of the equation –

⇒ 39 + 60 = 17

⇒ 99 ≠ 17

Fourth option: +, =, ×, +, ×

⇒ 221 + 17 = 3 × 60 + 7 × 10

Solving the L.H.S. and R.H.S. of the equation –

⇒ 238 = 180 + 70

⇒ 238 ≠ 250

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

Q. 196 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
50 * 95 * 19 * 15 * 3 * 1

Option 1:
=, ÷, +, ×, ×

Option 2:
+, =, ÷, +, +

Option 3:
+, ×, ×, =, ÷

Option 4:
×, +, =, ÷, ×

Correct Answer:
=, ÷, +, ×, ×

Solution:
Given:
50 * 95 * 19 * 15 * 3 * 1

Replace * with the mathematical signs and solve the equations one by one using BODMAS.
Let's check the given options –

First option: =, ÷, +, ×, ×

⇒ 50 = 95 ÷ 19 + 15 × 3 × 1

Solving the R.H.S. of the equation –

= 5 + 45 = 50

L.H.S. = 50

Second option: +, =, ÷, +, +

⇒ 50 + 95 = 19 ÷ 15 + 3 + 1

Solving the L.H.S. and R.H.S. of the equation –

= 145 = 1.26 + 4

= 145 ≠ 4.26

Third option: +, ×, ×, =, ÷

⇒ 50 + 95 × 19 × 15 = 3 ÷ 1

Solving the L.H.S. and R.H.S. of the equation –

= 50 + 27075 = 3

= 27125 ≠ 3

Fourth option: ×, +, =, ÷, ×

⇒ 50 × 95 + 19 = 15 ÷ 3 × 1

Solving the L.H.S. and R.H.S. of the equation –

= 4750 + 19 = 5 × 1

= 4769 ≠ 5

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

Q. 197 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
23 * 12 * 36 * 2 * 9 * 285

Option 1:
–, =, ×, ×, ÷

Option 2:
×, +, ÷, –, =

Option 3:
+, +, =, ×, ×

Option 4:
=, +, +, ×, –

Correct Answer:
×, +, ÷, –, =

Solution:
Given:
23 * 12 * 36 * 2 * 9 * 285

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –

First option: –, =, ×, ×, ÷

⇒ 23 – 12 = 36 × 2 × 9 ÷ 285

Solving the L.H.S. and R.H.S. of the equation –

⇒ 11 = 36 × 2 × 0.0315

⇒ 11 ≠ 2.27

Second option: ×, +, ÷, –, =

⇒ 23 × 12 + 36 ÷ 2 – 9 = 285

Solving the L.H.S. of the equation –

= 276 + 18 – 9

= 285 = R.H.S.

Third option: +, +, =, ×, ×

⇒ 23 + 12 + 36 = 2 × 9 × 285

Solving the L.H.S. and R.H.S. of the equation –

= 71 ≠ 5130

Fourth option: =, +, +, ×, –

⇒ 23 = 12 + 36 + 2 × 9 – 285

Solving the R.H.S. of the equation –

= 12 + 36 + 18 – 285

= 66 – 285

= 23 ≠ –219

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

Q. 198 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.
65 * 56 * 8 * 19 * 2 * 34

Option 1:
–, ÷, –, ×, =

Option 2:
+, +, –, ×, =

Option 3:
+, ×, –, ×, =

Option 4:
+, ÷, –, ×, =

Correct Answer:
+, ÷, –, ×, =

Solution:
Given:
65 * 56 * 8 * 19 * 2 * 34

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –

First option: –, ÷, –, ×, =

⇒ 65 – 56 ÷ 8 – 19 × 2 = 34

Solving the L.H.S. of the equation –

= 65 – 7 – 38

= 20 ≠ 34

Second option: +, +, –, ×, =

⇒ 65 + 56 + 8 – 19 × 2 = 34

Solving the L.H.S. of the equation –

= 65 + 56 + 8 – 38

= 129 – 38

= 91 ≠ 34

Third option: +, ×, –, ×, =

⇒ 65 + 56 × 8 – 19 × 2 = 34

Solving the L.H.S. of the equation –

= 65 + 448 – 38

= 475 ≠ 34

Fourth option: +, ÷, –, ×, =

⇒ 65 + 56 ÷ 8 – 19 × 2 = 34

Solving the L.H.S. of the equation –

= 65 + 7 – 38

= 34 = R.H.S.

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

Q. 199 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
831 * 3 * 13 * 45 * 245 * 1

Option 1:
÷, +, –, =, ×

Option 2:
=, ×, ÷, +, –

Option 3:
=, –, ÷, +, –

Option 4:
=, ÷, +, –, ×

Correct Answer:
÷, +, –, =, ×

Solution:
Given:
831 * 3 * 13 * 45 * 245 * 1

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –

First option: ÷, +, –, =, ×

⇒ 831 ÷ 3 + 13 – 45 = 245 × 1

Solving the L.H.S. of the equation –

= 277 + 13 – 45

= 245 = R.H.S.

Second option: =, ×, ÷, +, –

⇒ 831 = 3 × 13 ÷ 45 + 245 – 1

Solving the R.H.S of the equation –

= 3 × 13 ÷ 45 + 245 – 1

= 0.86 + 245 – 1

= 831 ≠ 244.86

Third option: =, –, ÷, +, –

⇒ 831 = 3 – 13 ÷ 45 + 245 – 1

Solving the R.H.S. of the equation –

= 3 – 0.289 + 244

= 831 ≠ 246.71

Fourth option: =, ÷, +, –, ×

⇒ 831 = 3 ÷ 13 + 45 – 245 × 1

Solving the L.H.S. of the equation –

= 0.23 + 45 – 245

= 188 ≠ –199.77

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

Q. 200 **Directions:** Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.
52 * 4 * 38 * 5 * 5 * 0

Option 1:
×, ×, +, =, ×

Option 2:
÷, =, –, ×, +

Option 3:
×, +, ÷, =, –

Option 4:
÷, =, –, ÷, ×

Correct Answer:
÷, =, –, ×, +

Solution:
Given:
52 * 4 * 38 * 5 * 5 * 0

Replace * with the mathematical signs and solve the equations one by one using the BODMAS.
Let's check the given options –

First option: ×, ×, +, =, ×

⇒ 52 × 4 × 38 + 5 = 5 × 0

Solving the L.H.S. and R.H.S. of the equation –

⇒ 7904 + 5 = 0

⇒ 7909 ≠ 0

Second option: ÷, =, –, ×, +

⇒ 52 ÷ 4 = 38 – 5 × 5 + 0

Solving the L.H.S. and R.H.S. of the equation –

⇒ 13 = 38 – 25

⇒ 13 = 13

Third option: ×, +, ÷, =, –

⇒ 52 × 4 + 38 ÷ 5 = 5 – 0

Solving the L.H.S. and R.H.S. of the equation –

⇒ 52 × 4 + 7.6 = 5 – 0

⇒ 208 + 7.6 = 5

⇒ 215.6 ≠ 5

Fourth option: ÷, =, –, ÷, ×

⇒ 52 ÷ 4 = 38 – 5 ÷ 5 × 0

Solving the L.H.S. and R.H.S. of the equation –

⇒ 13 = 38 – 1

⇒ 13 ≠ 37

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

Q. 201 **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?
55 A 5 B (7 A 4) C 75 D (25 D 5) =?

Option 1:
95

Option 2:
110

Option 3:
100

Option 4:
105

Correct Answer:
95

Solution:
Given:
A denotes addition, B denotes multiplication, C denotes subtraction and D denotes division,
55 A 5 B (7 A 4) C 75 D (25 D 5) =?

After changing the letters with equivalent symbols, the equation is as follows –

= 55 + 5 × (7 + 4) – 75 ÷ (25 ÷ 5)

= 55 + 5 × 11 – 75 ÷ 5

= 55 + 55 – 15

= 95

Therefore, after solving the equation the answer is 95. Hence, the **first option** is correct.

Q. 202 **Directions:** Select the combination of signs that when sequentially placed in the given blanks will make the equation correct.

12 _4 _ 3 _ 24

Option 1:

÷, × and =

Option 2:

×, ÷ and =

Option 3:

+, × and =

Option 4:

÷, =, and ×

Correct Answer:
+, × and =

Solution:
Given:
12 _4 _ 3 _ 24

Let's check the given options –
First option: ÷, × and =
⇒ 12 ÷ 4 × 3 = 24
Solving the L.H.S of the equation –
= 3 × 3
= 9 ≠ 24
Second option: ×, ÷ and =
⇒ 12 × 4 ÷ 3 = 24
Solving the L.H.S of the equation –
= 12 × 1.34
= 16 ≠ 24
Third option: +, × and =
⇒ 12 + 4 × 3 = 24
Solving the L.H.S of the equation –
= 12 + 12
= 24
Fourth option: ÷, =, and ×
⇒ 12 ÷ 4 = 3 × 24
Solving the L.H.S and R.H.S of the equation –
⇒ 3 ≠ 72

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

Q. 203 **Directions:** Select the correct combination of mathematical signs that can sequentially replace the * signs from left to right to balance the following equation.

31 * 2 * 60 * 30 * 15 * 49

Option 1:

×, ÷, +, –, =

Option 2:

×, –, +, ÷, =

Option 3:

–, ÷, +, ×, =

Option 4:

×, +, ÷, –, =

Correct Answer:

×, +, ÷, –, =

Solution:

Given:

31 * 2 * 60 * 30 * 15 * 49

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

Let's check the options –

First options: ×, ÷, +, –, =

31 × 2 ÷ 60 + 30 – 15 = 49

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

= 31 × 2 ÷ 60 + 30 – 15

= 31 × 0.033 + 30 – 15

= 1.023 + 30 – 15

= 16.023 ≠ 49

Second option: ×, –, +, ÷, =

31 × 2 – 60 + 30 ÷ 15 = 49

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

= 31 × 2 – 60 + 30 ÷ 15

= 31 × 2 – 60 + 2

= 62 – 60 + 2

= 4 ≠ 49

Third option: –, ÷, +, ×, =

31 – 2 ÷ 60 + 30 × 15 = 49

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

= 31 – 2 ÷ 60 + 30 × 15

= 31 – 0.033 + 30 × 15

= 31 – 0.033 + 450

= 480.967 ≠ 49

Fourth option: ×, +, ÷, –, =

31 × 2 + 60 ÷ 30 – 15 = 49

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

= 31 × 2 + 60 ÷ 30 – 15

= 31 × 2 + 2 – 15
= 62 + 2 – 15
= 49

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

Q. 204 **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?
74 A (31 B 2) B 2 C (68 C 4) D (4 B 2) = ?

Option 1:
188

Option 2:
190

Option 3:
98

Option 4:
160

Correct Answer:
190

Solution:
Given:
74 A (31 B 2) B 2 C (68 C 4) D (4 B 2) = ?

On replacing the alphabet with mathematical signs, we get –
= 74 + (31 × 2) × 2 – (68 – 4) ÷ (4 × 2)
= 74 + 62 × 2 – 64 ÷ 8
= 74 + 62 × 2 – 8
= 74 + 124 – 8
= 190

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

Q. 205 **Directions:** Select the correct combination of mathematical signs that can sequentially replace the * signs from left to right to balance the following equation.
24 * 12 * 35 * 24 * 6 * 319

Option 1:
+, –, ÷, ×, =

Option 2:
×, +, –, ÷, =

Option 3:
÷, +, –, ×, =

Option 4:

×, ÷, +, –, =

Correct Answer:

×, +, –, ÷, =

Solution:

Given:

24 * 12 * 35 * 24 * 6 * 319

Let's check the options –

First option: +, –, ÷, ×, =

24 + 12 – 35 ÷ 24 × 6 = 319

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

= 24 + 12 – 35 ÷ 24 × 6

= 24 + 12 – 8.75

= 27.25 ≠ 319

Second option: ×, +, –, ÷, =

24 × 12 + 35 – 24 ÷ 6 = 319

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

= 24 × 12 + 35 – 24 ÷ 6

= 24 × 12 + 35 – 4

= 288 + 35 – 4

= 319

Third option: ÷, +, –, ×, =

24 ÷ 12 + 35 – 24 × 6 = 319

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

= 24 ÷ 12 + 35 – 24 × 6

= 2 + 35 – 24 × 6

= 2 + 35 – 144

= –107 ≠ 319

Fourth option: ×, ÷, +, –, =

24 × 12 ÷ 35 + 24 – 6 = 319

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

= 24 × 12 ÷ 35 + 24 – 6

= 24 × 0.34 + 24 – 6

= 8.16 + 24 – 6

= 26.16 ≠ 319

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

Q. 206 **Directions:** Select the correct combination of mathematical signs that can sequentially replace the * signs from left to right to balance the following equation.

15 * 5 * 24 * 140 * 7 * 71

Option 1:

÷, +, –, ×, =

Option 2:

×, –, ÷, +, =

Option 3:

×, –, +, ÷, =

Option 4:

×, ÷, +, –, =

Correct Answer:

×, –, +, ÷, =

Solution:

Given:

15 * 5 * 24 * 140 * 7 * 71

Let's check the options –

First option: ÷, +, –, ×, =

15 ÷ 5 + 24 – 140 × 7 = 71

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

= 15 ÷ 5 + 24 – 140 × 7

= 3 + 24 – 140 × 7

= 3 + 24 – 980

= –953 ≠ 71

Second option: ×, –, ÷, +, =

15 × 5 – 24 ÷ 140 + 7 = 71

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

= 15 × 5 – 24 ÷ 140 + 7

= 15 × 5 – 0.171 + 7

= 75 – 0.171 + 7

= 81.829 ≠ 71

Third option: ×, –, +, ÷, =

15 × 5 – 24 + 140 ÷ 7 = 71

On solving the L.H.S. of the given equation –
= 15 × 5 – 24 + 140 ÷ 7
= 15 × 5 – 24 + 20
= 75 – 24 + 20
= 71
Fourth option: ×, ÷, +, –, =
15 × 5 ÷ 24 + 140 – 7 = 71
On solving the L.H.S. of the given equation –
= 15 × 5 ÷ 24 + 140 – 7
= 15 × 0.208 + 140 – 7
= 3.12 + 140 – 7
= 136.12 ≠ 71

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

Q. 207 **Directions:** Select the correct combination of mathematical signs to replace * signs and to balance the following equation.
(9 * 8 * 7) * 13 * 5

Option 1:
×, =, ÷, −

Option 2:
×, −, ÷, =

Option 3:

÷, −, =, ×

Option 4:

−, ÷, ×, =

Correct Answer:

×, −, ÷, =

Solution:

Given:

(9 * 8 * 7) * 13 * 5

Let's check the options –

First option: ×, =, ÷, −

9 × 8 = 7 ÷ 13 – 5

9 × 8 = 7 ÷ 13 – 5

72 = 0.53 – 5

72 = – 4.47

L.H.S. ≠ R.H.S.

Second option: ×, −, ÷, =

(9 × 8 – 7) ÷ 13 = 5

L.H.S. = (9 × 8 – 7) ÷ 13

= (72 – 7) ÷ 13

= 65 ÷ 13

= 5

Third option: ÷, −, =, ×

(9 ÷ 8 – 7) = 13 × 5

L.H.S. = (9 ÷ 8 – 7) = (1.125 – 7) = – 5.875

R.H.S. = 13 × 5 = 65

– 5.875 ≠ 65

L.H.S. ≠ R.H.S.

Fourth option: −, ÷, ×, =

(9 – 8 ÷ 7) × 13 = 5

L.H.S. = (9 – 8 ÷ 7) × 13

= (9 – 1.143) × 13

= 7.857 × 13

= 102.141 ≠ 5

L.H.S. ≠ R.H.S.

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

Q. 208 **Directions:** What will be the value of the given expression if A means +, B means –, C means ×, and D means ÷?

40 A 30 B 15 C 20 D 5 = ?

Option 1:

5

Option 2:

10

Option 3:

15

Option 4:
20

Correct Answer:
10

Solution:
Given:
40 A 30 B 15 C 20 D 5 = ?

On replacing the alphabet with mathematical signs, we get –
= 40 + 30 – 15 × 20 ÷ 5
= 40 + 30 – 15 × 4
= 40 + 30 – 60
= 10

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

Q. 209 **Directions:** Select the combination of signs that when sequentially placed in the given blanks will make the equation correct.
7 _ 3 _ 4 _ 12 _ 6 = 19

Option 1:
+, ÷, ×, –

Option 2:

×, –, +, ÷

Option 3:

–, ×, +, ÷

Option 4:

÷, ×, +, –

Correct Answer:

×, –, +, ÷

Solution:

Given:

7 _ 3 _ 4 _ 12 _ 6 = 19

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

First option: +, ÷, ×, –

7 + 3 ÷ 4 × 12 – 6 = 19

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

= 7 + 0.75 × 12 – 6

= 7 + 9 – 6

= 10 ≠ 19

Second option: ×, –, +, ÷

7 × 3 – 4 + 12 ÷ 6 = 19

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

= 7 × 3 – 4 + 2

= 21 – 4 + 2

= 19

Third option: –, ×, +, ÷

7 – 3 × 4 + 12 ÷ 6 = 19

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

= 7 – 3 × 4 + 2 = 19

= 7 – 12 + 2 = 19

= –3 ≠ 19

Fourth option: ÷, ×, +, –

7 ÷ 3 × 4 + 12 – 6 = 19

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

= 2.33 × 4 + 12 – 6

= 9.32 + 12 – 6

= 15.32 ≠ 19

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

Q. 210 **Directions:** Choose the correct sequence of signs for balancing the following equation.

8 _ 4 _ 2 _ 6 _ 3 = 19

Option 1:

+, ×, –, ÷

Option 2:

÷, +, –, ×

Option 3:

×, ÷, –, +

Option 4:

×, ÷, +, –

Correct Answer:

×, ÷, +, –

Solution:

Given:

8 _ 4 _ 2 _ 6 _ 3 = 19

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

First option: +, ×, –, ÷

8 + 4 × 2 – 6 ÷ 3 = 19

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

= 8 + 4 × 2 – 2

= 8 + 8 – 2

= 14 ≠ 19

Second option: ÷, +, –, ×

8 ÷ 4 + 2 – 6 × 3 = 19

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

= 2 + 2 – 6 × 3

= 2 + 2 – 18

= –14 ≠ 19

Third option: ×, ÷, –, +

8 × 4 ÷ 2 – 6 + 3 = 19

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

= 8 × 2 – 6 + 3
= 16 – 6 + 3
= 13 ≠ 19

Fourth option: ×, ÷, +, –
8 × 4 ÷ 2 + 6 – 3 = 19
On solving the L.H.S. of the given equation –
= 8 × 2 + 6 – 3
= 16 + 6 – 3
= 19

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

Q. 211 **Directions:** Choose the correct sequence of signs for balancing the following equation.
20 _ 4 _ 6 _ 5 _ 35

Option 1:
÷, ×, –, =

Option 2:
×, ÷, +, =

Option 3:
÷, ×, +, =

Option 4:

+, ×, ÷, =

Correct Answer:

÷, ×, +, =

Solution:

Given:

20 _ 4 _ 6 _ 5 _ 35

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

First option: ÷, ×, –, =

20 ÷ 4 × 6 – 5 = 35

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

= 5 × 6 – 5

= 30 – 5

= 25 ≠ 35

Second option: ×, ÷, +, =

20 × 4 ÷ 6 + 5 = 35

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

= 20 × 0.67 + 5

= 13.4 + 5

= 18.4 ≠ 35

Third option: ÷, ×, +, =

20 ÷ 4 × 6 + 5 = 35

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

= 5 × 6 + 5

= 30 + 5

= 35

Fourth option: +, ×, ÷, =

20 + 4 × 6 ÷ 5 = 35

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

= 20 + 4 × 1.2

= 20 + 4.8

= 24.8 ≠ 35

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

Q. 212 **Directions:** Select the correct combination of the mathematical signs to replace X in the below equation and thereby balance it.

9 X 3 X 6 X 2 X 9

Option 1:

÷, ×, =, ×

Option 2:

÷, ×, =, –

Option 3:

×, =, –, ÷

Option 4:

×, ÷, +, =

Correct Answer:

÷, ×, =, ×

Solution:

Given:

9 X 3 X 6 X 2 X 9

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

First option: ÷, ×, =, ×

9 ÷ 3 × 6 = 2 × 9

L.H.S. = 9 ÷ 3 × 6 = 3 × 6 = 18

R.H.S. = 2 × 9 = 18

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

Second option: ÷, ×, =, –

9 ÷ 3 × 6 = 2 – 9

L.H.S. = 9 ÷ 3 × 6 = 3 × 6 = 18

R.H.S. = 2 – 9 = –7

L.H.S. ≠ R.H.S.

Third option: ×, =, –, ÷

9 × 3 = 6 – 2 ÷ 9

L.H.S. = 9 × 3 = 27

R.H.S. = 6 – 2 ÷ 9 = 6 – 0.22 = 5.78

L.H.S. ≠ R.H.S.

Fourth option: ×, ÷, +, =

9 × 3 ÷ 6 + 2 = 9

L.H.S. = 9 × 3 ÷ 6 + 2

= 9 × 0.5 + 2

= 4.5 + 2
= 6.5
L.H.S. ≠ R.H.S.

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

Q. 213 **Directions:** Select the correct combination of the mathematical signs that can be filled to balance the following equation:
12 _ 4 _ 2 _ 2 _ 5 _ 3

Option 1:
+, =, ÷, ×, +

Option 2:
÷, ×, +, =, +

Option 3:
÷, ×, –, =, ×

Option 4:
÷, ×, =, +, +

Correct Answer:
÷, ×, +, =, +

Solution:

Given:

12 _ 4 _ 2 _ 2 _ 5 _ 3

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

First option: +, =, ÷, ×, +

12 + 4 = 2 ÷ 2 × 5 + 3

L.H.S. = 12 + 4 = 16

R.H.S. = 2 ÷ 2 × 5 + 3 = 1 × 5 + 3 = 5 + 3 = 8

L.H.S. ≠ R.H.S.

Second option: ÷, ×, +, =, +

12 ÷ 4 × 2 + 2 = 5 + 3

L.H.S. = 12 ÷ 4 × 2 + 2 = 3 × 2 + 2 = 6 + 2 = 8

R.H.S. = 5 + 3 = 8

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

Third option: ÷, ×, –, =, ×

12 ÷ 4 × 2 – 2 = 5 × 3

L.H.S. = 12 ÷ 4 × 2 – 2 = 3 × 2 – 2 = 6 – 2 = 4

R.H.S. = 5 × 3 = 15

L.H.S. ≠ R.H.S.

Fourth option: ÷, ×, =, +, +

12 ÷ 4 × 2 = 2 + 5 + 3

L.H.S. = 12 ÷ 4 × 2 = 3 × 2 = 6

R.H.S. = 2 + 5 + 3 = 10

L.H.S. ≠ R.H.S.

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

Q. 214 **Directions:** Select the correct combination of the mathematical signs that can be filled to balance the following equation.
24 _ 6 _ 3 _ 4 _ 10 _ 6

Option 1:
÷, ×, =, +, +

Option 2:
÷, ×, +, =, +

Option 3:
÷, ×, –, =, ×

Option 4:
+, =, ÷, ×, +

Correct Answer:
÷, ×, +, =, +

Solution:
Given:
24 _ 6 _ 3 _ 4 _ 10 _ 6

Replace _ with the mathematical signs and solve the equations one by one using BODMAS.
First option: ÷, ×, =, +, +

24 ÷ 6 × 3 = 4 + 10 + 6

L.H.S. = 24 ÷ 6 × 3 = 4 × 3 = 12

R.H.S. = 4 + 10 + 6 = 20

L.H.S. ≠ R.H.S.

Second option: ÷, ×, +, =, +

24 ÷ 6 × 3 + 4 = 10 + 6

L.H.S. = 24 ÷ 6 × 3 + 4 = 4 × 3 + 4 = 12 + 4 = 16

R.H.S. = 10 + 6 = 16

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

Third option: ÷, ×, –, =, ×

24 ÷ 6 × 3 – 4 = 10 × 6

L.H.S. = 24 ÷ 6 × 3 – 4 = 4 × 3 – 4 = 12 – 4 = 8

R.H.S. = 10 × 6 = 60

L.H.S. ≠ R.H.S.

Fourth option: +, =, ÷, ×, +

24 + 6 = 3 ÷ 4 × 10 + 6

L.H.S. = 24 + 6 = 30

R.H.S. = 0.75 × 10 + 6 = 7.5 + 6 = 13.5

L.H.S. ≠ R.H.S.

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

Q. 215

Directions: Select the correct combination of the mathematical signs to replace star symbols (*) in the below equation and thereby balance it.

65 * 5 * 17 * 24 * 21 * 224

Option 1:

÷, ×, +, –, =

Option 2:

+, ×, –, ÷, =

Option 3:

÷, ×, –, +, =

Option 4:

×, +, –, ÷, =

Correct Answer:

÷, ×, +, –, =

Solution:

Given:

65 * 5 * 17 * 24 * 21 * 224

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

First options: ÷, ×, +, –, =

65 ÷ 5 × 17 + 24 – 21 = 224

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

= 65 ÷ 5 × 17 + 24 – 21

= 13 × 17 + 24 – 21

= 221 + 24 – 21

= 224

Second option: +, ×, –, ÷, =

65 + 5 × 17 – 24 ÷ 21 = 224

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

= 65 + 5 × 17 – 24 ÷ 21

= 65 + 5 × 17 – 1.143

= 65 + 85 – 1.143

= 148.857 ≠ 224

Third option: ÷, ×, –, +, =

65 ÷ 5 × 17 – 24 + 21 = 224

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

= 13 × 17 – 24 + 21

= 221 – 24 + 21

= 218 ≠ 224

Fourth option: ×, +, –, ÷, =

65 × 5 + 17 – 24 ÷ 21 = 224

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

= 65 × 5 + 17 – 1.14

= 325 + 17 – 1.14

= 340.86 ≠ 224

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

Q. 216 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.

42 * 7 * 3 * 2 * 13 * 7

Option 1:

÷, ×, −, =, ×

Option 2:

+, =, ÷, ×, +

Option 3:

÷, ×, =, +, +

Option 4:

÷, ×, +, =, +

Correct Answer:

÷, ×, +, =, +

Solution:

Given:

42 * 7 * 3 * 2 * 13 * 7

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

First option: ÷, ×, −, =, ×

42 ÷ 7 × 3 − 2 = 13 × 7

L.H.S. = 42 ÷ 7 × 3 − 2 = 6 × 3 − 2 = 18 − 2 = 16

R.H.S. = 13 × 7 = 91

L.H.S. ≠ R.H.S.

Second option: +, =, ÷, ×, +

42 + 7 = 3 ÷ 2 × 13 + 7

L.H.S. = 42 + 7 = 49

R.H.S. = 3 ÷ 2 × 13 + 7 = 1.5 × 13 + 7 = 19.5 + 7 = 26.5

L.H.S. ≠ R.H.S.

Third option: ÷, ×, =, +, +

42 ÷ 7 × 3 = 2 + 13 + 7

L.H.S. = 42 ÷ 7 × 3 = 6 × 3 = 18

R.H.S. = 2 + 13 + 7 = 22

L.H.S. ≠ R.H.S.

Fourth option: ÷, ×, +, =, +

42 ÷ 7 × 3 + 2 = 13 + 7

L.H.S. = 42 ÷ 7 × 3 + 2 = 6 × 3 + 2 = 18 + 2 = 20

R.H.S. = 13 + 7 = 20

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

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

Q. 217 **Directions:** Which of the following equations will become correct by replacing the * signs from left to right as per the given sequence of mathematical signs?
The given sequence:
+, ÷, –, ×, =

Option 1:
45 * 15 * 5 * 7 * 5 * 13

Option 2:
45 * 24 * 8 * 7 * 5 * 23

Option 3:
60 * 15 * 5 * 7 * 5 * 25

Option 4:
45 * 15 * 5 * 5 * 5 * 18

Correct Answer:
45 * 15 * 5 * 7 * 5 * 13

Solution:
Given:
+, ÷, –, ×, =

Replace * with the mathematical signs and solve the equations one by one using BODMAS.
Let's check the given options –
First option: 45 * 15 * 5 * 7 * 5 * 13
⇒ 45 + 15 ÷ 5 – 7 × 5 = 13
Solving the L.H.S of the equation –
= 45 + 3 – 7 × 5
= 45 + 3 – 35
= 10 + 3
= 13
Second option: 45 * 24 * 8 * 7 * 5 * 23
⇒ 45 + 24 ÷ 8 – 7 × 5 = 23
Solving the L.H.S of the equation –
= 45 + 3 – 7 × 5
= 45 + 3 – 35
= 10 + 3

= 13 ≠ 23

Third option: 60 * 15 * 5 * 7 * 5 * 25

⇒ 60 + 15 ÷ 5 – 7 × 5 = 25

Solving the L.H.S of the equation –

= 60 + 3 – 7 × 5

= 60 + 3 – 35

= 25 + 3

= 28 ≠ 25

Fourth option: 45 * 15 * 5 * 5 * 5 * 18

⇒ 45 + 15 ÷ 5 – 5 × 5 = 18

Solving the L.H.S of the equation –

= 45 + 3 – 5 × 5

= 45 + 3 – 25

= 20 + 3

= 23 ≠ 18

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

Q. 218 **Directions:** If A denotes +, B denotes ×, C denotes –, and D denotes ÷, then what will come in place of (?) in the following equation?

2 B ? D 2 = 4 B 32 D 8

Option 1:

12

Option 2:
30

Option 3:
16

Option 4:
8

Correct Answer:
16

Solution:
Given:
2 B ? D 2 = 4 B 32 D 8

Let the missing number be a.
After replacing the letters with the mathematical signs, we get –
$\Rightarrow 2 \times a \div 2 = 4 \times 32 \div 8$
$\Rightarrow 2 \times a \div 2 = 4 \times 4$
$\Rightarrow 2 \times a \div 2 = 16$
$\Rightarrow a = 16$

So, 16 is the answer to the given equation. Hence, the **third option** is correct.

Q. 219 **Directions:** If A denotes +, B denotes ×, C denotes –, and D denotes ÷ then what will be the value of the following expression?
39 D 13 B 2 C 6 A 8 = ?

Option 1:
10

Option 2:
8

Option 3:
12

Option 4:
9

Correct Answer:
8

Solution:
Given:
39 D 13 B 2 C 6 A 8 = ?

After replacing the letters with the mathematical signs, we get –
= 39 ÷ 13 × 2 – 6 + 8
= 3 × 2 – 6 + 8

= 6 – 6 + 8
= 8

So, 8 is the answer to the given equation. Hence, the **second option** is correct.

Q. 220 **Directions:** If A denotes +, B denotes ×, C denotes –, and D denotes ÷, then what will be the value of the following equation?
96 D 3 B 8 C 25 A 14 = ?

Option 1:
217

Option 2:
234

Option 3:
254

Option 4:
245

Correct Answer:
245

Solution:

Given:
96 D 3 B 8 C 25 A 14 = ?

After replacing the letters with the mathematical signs, we get –
= 96 ÷ 3 × 8 – 25 + 14
= 32 × 8 – 25 + 14
= 256 – 25 + 14
= 245

So, 245 is the answer to the given equation. Hence, the **fourth option** is correct.

Q. 221 **Directions:** If A denotes +, B denotes ×, C denotes –, and D denotes ÷, then what will come in place of (?) in the following equation?
7 A 3 B 24 D 2 = 20 B ? A 3

Option 1:
2

Option 2:
20

Option 3:
14

Option 4:
7

Correct Answer:
2

Solution:
Given:
7 A 3 B 24 D 2 = 20 B ? A 3

Let the missing number be a.
After replacing the letters with the mathematical signs, we get –
⇒ 7 + 3 × 24 ÷ 2 = 20 × a + 3
⇒ 7 + 3 × 12 = 20 × a + 3
⇒ 7 + 36 = 20 × a + 3
⇒ 43 = 20 × a + 3
⇒ 43 – 3 = 20 × a
⇒ 40 = 20 × a
⇒ a = 2

So, 2 is the answer to the given equation. Hence, the **first option** is correct.

Q. 222 **Directions:** If A denotes +, B denotes ×, C denotes −, and D denotes ÷, then what will be the value of the following equation?
13 B 7 A 64 D 4 C 23 = ?

Option 1:
82

Option 2:
84

Option 3:
86

Option 4:
76

Correct Answer:
84

Solution:
Given:
13 B 7 A 64 D 4 C 23 = ?

After replacing the letters with the mathematical signs, we get –
= 13 × 7 + 64 ÷ 4 – 23
= 13 × 7 + 16 – 23
= 91 + 16 – 23
= 84

So, 84 is the answer to the given equation. Hence, the **second option** is correct.

Q. 223 **Directions:** Select the combination of mathematical signs that when sequentially placed in the blanks of the given equation will balance the equation.
(157_13)_36_1_5

Option 1:
+, ÷, –, =

Option 2:
–, ÷, +, =

Option 3:
+, –, ÷, =

Option 4:
÷, –, +, =

Correct Answer:
–, ÷, +, =

Solution:
Given:
(157_13)_36_1_5

Let's check each option –
First Option: +, ÷, –, =
(157 + 13) ÷ 36 – 1 = 5

L.H.S. = 170 ÷ 36 – 1

= 4.722 – 1

= 3.722 ≠ 5

Second Option: –, ÷, +, =

(157 – 13) ÷ 36 + 1 = 5

L.H.S. = 144 ÷ 36 + 1

= 4 + 1

= 5

Third Option: +, –, ÷, =

(157 + 13) – 36 ÷ 1 = 5

L.H.S. = 170 – 36 ÷ 1

= 170 – 36

= 134 ≠ 5

Fourth Option: ÷, –, +, =

(157 ÷ 13) – 36 + 1 = 5

L.H.S. = 12.08 – 36 + 1

= 13.08 – 36

= –22.92 ≠ 5

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

Q. 224 **Directions:** Select the correct combination of mathematical signs to replace * signs and to balance the following equation.

86 * (5 * 8 * 4) * 9 * 85

Option 1:

–, ×, ÷, +, =

Option 2:

+, ×, ÷, –, =

Option 3:

+, –, ×, ÷, =

Option 4:

÷, –, ×, +, =

Correct Answer:

–, ×, ÷, +, =

Solution:

Given:

86 * (5 * 8 * 4) * 9 * 85

Let's check each option –

First Option: –, ×, ÷, +, =

86 – (5 × 8 ÷ 4) + 9 = 85

L.H.S. = 86 – (5 × 2) + 9

= 86 – 10 + 9

= 85

Second Option: +, ×, ÷, –, =

86 + (5 × 8 ÷ 4) – 9 = 85

L.H.S. = 86 + (5 × 2) – 9

= 86 + 10 – 9

= 87 ≠ 85

Third Option: +, –, ×, ÷, =

86 + (5 – 8 × 4) ÷ 9 = 85

L.H.S. = 86 + (5 – 32) ÷ 9

= 86 – 27 ÷ 9

= 86 – 3

= 83 ≠ 85

Fourth Option: ÷, –, ×, +, =

86 ÷ (5 – 8 × 4) + 9 = 85

L.H.S. = 86 ÷ (5 – 32) + 9

= 86 ÷ (–27) + 9

= 5.815 ≠ 85

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

Q. 225 **Directions:** What will be the value of the given expression if A means +, B means –, C means ×, and D means ÷?

50 A 40 B 10 C 12 D 2 = ?

Option 1:

35

Option 2:
20

Option 3:
40

Option 4:
30

Correct Answer:
30

Solution:
Given:
50 A 40 B 10 C 12 D 2 = ?

On replacing the alphabet with mathematical signs, we get –
= 50 + 40 – 10 × 12 ÷ 2
= 50 + 40 – 10 × 6
= 50 + 40 – 60
= 30

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

Q. 226 **Directions:** What will be the value of the given expression if A means +, B means –, C means ×, and D means ÷?
25 B 35 A 12 C 25 D 5 = ?

Option 1:
45

Option 2:
50

Option 3:
55

Option 4:
40

Correct Answer:
50

Solution:
Given:
25 B 35 A 12 C 25 D 5 = ?

On replacing the alphabet with mathematical signs, we get –
= 25 – 35 + 12 × 25 ÷ 5
= 25 – 35 + 12 × 5
= 25 – 35 + 60
= 50

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

Q. 227 **Directions:** Select the correct combination of mathematical signs that can sequentially replace the * signs from left to right to balance the following equation.
30 * 3 * 16 * 4 * 24 * 70

Option 1:
×, ÷, +, –, =

Option 2:
÷, ×, –, +, =

Option 3:
×, +, ÷, –, =

Option 4:
+, ×, –, ÷, =

Correct Answer:
×, +, ÷, –, =

Solution:
Given:
30 * 3 * 16 * 4 * 24 * 70

Let's check each option –

First Option: ×, ÷, +, –, =

30 × 3 ÷ 16 + 4 – 24 = 70

Solving the L.H.S. of the given equation –

= 30 × 0.1875 + 4 – 24

= 5.625 + 4 – 24

= –14.375 ≠ 70

Second Option: ÷, ×, –, +, =

30 ÷ 3 × 16 – 4 + 24 = 70

Solving the L.H.S. of the given equation –

= 10 × 16 – 4 + 24

= 160 – 4 + 24

= 180 ≠ 70

Third Option: ×, +, ÷, –, =

30 × 3 + 16 ÷ 4 – 24 = 70

Solving the L.H.S. of the given equation –

= 30 × 3 + 4 – 24

= 90 + 4 – 24

= 70

Fourth Option: +, ×, –, ÷, =

30 + 3 × 16 – 4 ÷ 24 = 70

Solving the L.H.S. of the given equation –

= 30 + 3 × 16 – 0.167

= 30 + 48 – 0.167

= 77.833 ≠ 70

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

Q. 228 **Directions:** Select the correct combination of mathematical signs to sequentially replace the * signs from left to right to balance the given equation.
44 * 32 * 8 * 16 * 3 * 0

Option 1:
+, ×, –, ÷, =

Option 2:
×, +, –, ÷, =

Option 3:
+, –, ×, ÷, =

Option 4:
+, ÷, –, ×, =

Correct Answer:
+, ÷, –, ×, =

Solution:
Given:
44 * 32 * 8 * 16 * 3 * 0

Let's check each option –
First Option: +, ×, –, ÷, =
44 + 32 × 8 – 16 ÷ 3 = 0

Solving the L.H.S. of the given equation –

= 44 + 32 × 8 – 5.33

= 44 + 256 – 5.33

= 294.67 ≠ 0

Second Option: ×, +, –, ÷, =

44 × 32 + 8 – 16 ÷ 3 = 0

Solving the L.H.S. of the given equation –

= 44 × 32 + 8 – 5.33

= 1408 + 8 – 5.33

= 1410.67 ≠ 0

Third Option: +, –, ×, ÷, =

44 + 32 – 8 × 16 ÷ 3 = 0

Solving the L.H.S. of the given equation –

= 44 + 32 – 8 × 5.33

= 44 + 32 – 42.64

= 33.36 ≠ 0

Fourth Option: +, ÷, –, ×, =

44 + 32 ÷ 8 – 16 × 3 = 0

Solving the L.H.S. of the given equation –

= 44 + 4 – 16 × 3

= 44 + 4 – 48

= 0

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

Q. 229 **Directions:** Select the correct combination of the mathematical signs to replace star symbols (*) in the below equation and thereby balance it.
36 * 4 * 9 * 27 * 9 * 150

Option 1:
+, ×, –, ÷, =

Option 2:
÷, ×, –, +, =

Option 3:
÷, ×, +, –, =

Option 4:
×, +, –, ÷, =

Correct Answer:
×, +, –, ÷, =

Solution:
Given:
36 * 4 * 9 * 27 * 9 * 150

Let's check each option –
First Option: +, ×, –, ÷, =
36 + 4 × 9 – 27 ÷ 9 = 150

Solving the L.H.S. of the given equation –

= 36 + 4 × 9 – 3

= 36 + 36 – 3

= 69 ≠ 150

Second Option: ÷, ×, –, +, =

36 ÷ 4 × 9 – 27 + 9 = 150

Solving the L.H.S. of the given equation –

= 9 × 9 – 27 + 9

= 81 – 27 + 9

= 63 ≠ 150

Third Option: ÷, ×, +, –, =

36 ÷ 4 × 9 + 27 – 9 = 150

Solving the L.H.S. of the given equation –

= 9 × 9 + 27 – 9

= 81 + 27 – 9

= 99 ≠ 150

Fourth Option: ×, +, –, ÷, =

36 × 4 + 9 – 27 ÷ 9 = 150

Solving the L.H.S. of the given equation –

= 36 × 4 + 9 – 3

= 144 + 9 – 3

= 150

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

Q. 230 **Directions:** Select the correct combination of the mathematical signs to replace star symbols (*) in the below equation and therefore balance it.
36 * 14 * 17 * 396 * 18 * 252

Option 1:
+, –, ×, ÷, =

Option 2:
+, ×, –, =, ÷

Option 3:
+, ×, –, ÷, =

Option 4:
×, +, –, ÷, =

Correct Answer:
+, ×, –, ÷, =

Solution:
Given:
36 * 14 * 17 * 396 * 18 * 252

Let's check each option –
First Option: +, –, ×, ÷, =
36 + 14 – 17 × 396 ÷ 18 = 252

L.H.S. = 36 + 14 – 17 × 396 ÷ 18

= 36 + 14 – 17 × 22

= 36 + 14 – 374

= –324

L.H.S. ≠ R.H.S.

Second Option: +, ×, –, =, ÷

36 + 14 × 17 – 396 = 18 ÷ 252

L.H.S. = 36 + 14 × 17 – 396 = 36 + 238 – 396 = –122

R.H.S. = 18 ÷ 252 = 0.0714

L.H.S. ≠ R.H.S.

Third Option: +, ×, –, ÷, =

36 + 14 × 17 – 396 ÷ 18 = 252

L.H.S. = 36 + 14 × 17 – 396 ÷ 18

= 36 + 14 × 17 – 22

= 36 + 238 – 22

= 252

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

Fourth Option: ×, +, –, ÷, =

36 × 14 + 17 – 396 ÷ 18 = 252

L.H.S. = 36 × 14 + 17 – 396 ÷ 18

= 36 × 14 + 17 – 22

= 504 + 17 – 22

= 499

L.H.S. ≠ R.H.S.

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