

OBJECTIVE TYPE QUESTIONS

PAGE: 8.13

Mark the correct alternative in each of the following:

1. 5 more than twice a number x is written as

- (a) $5 + x + 2$
- (b) $2x + 5$
- (c) $2x - 5$
- (d) $5x + 2$

Solution:

The option (b) is correct answer.

5 more than twice a number x is written as $2x + 5$.**2. The quotient of x by 2 is added to 5 is written as**

- (a) $x/2 + 5$
- (b) $2/x+5$
- (c) $(x+2)/5$
- (d) $x/(2+5)$

Solution:

The option (a) is correct answer.

The quotient of x by 2 is added to 5 is written as $x/2 + 5$.**3. The quotient of x by 3 is multiplied by y is written as**

- (a) $x/3y$
- (b) $3x/y$
- (c) $3y/x$
- (d) $xy/3$

Solution:

The option (d) is correct answer.

It can be written as

$$x/3 \times y = xy/3$$

4. 9 taken away from the sum of x and y is

- (a) $x + y - 9$
- (b) $9 - (x+y)$
- (c) $x+y/9$
- (d) $9/x+y$

Solution:

The option (a) is correct answer.

9 taken away from the sum of x and y is $x + y - 9$.**5. The quotient of x by y added to the product of x and y is written as**

- (a) $x/y + xy$
- (b) $y/x + xy$
- (c) $xy+x/y$
- (d) $xy+y/x$

Solution:

The option (a) is correct answer.

The quotient of x by y added to the product of x and y is written as $x/y + xy$.

6. $a^2b^3 \times 2ab^2$ is equal to

(a) $2a^3b^4$

(b) $2a^3b^5$

(c) $2ab$

(d) a^3b^5

Solution:

The option (b) is correct answer.

It can be written as

$$a^2b^3 \times 2ab^2 = 2a^2 \times a \times b^3 \times b^2 = 2a^3b^5.$$

7. $4a^2b^3 \times 3ab^2 \times 5a^3b$ is equal to

(a) $60a^3b^5$

(b) $60a^6b^5$

(c) $60a^6b^6$

(d) a^6b^6

Solution:

The option (c) is correct answer.

It can be written as

$$4a^2b^3 \times 3ab^2 \times 5a^3b = 4 \times 3 \times 5 \times a^2 \times a \times a^3 \times b^3 \times b^2 \times b = 60a^6b^6$$

8. If $2x^2y$ and $3xy^2$ denote the length and breadth of a rectangle, then its area is

(a) $6xy$

(b) $6x^2y^2$

(c) $6x^3y^3$

(d) x^3y^3

Solution:

The option (c) is correct answer.

We know that area of a rectangle = length \times breadth

By substituting the values

$$\text{Area} = 2x^2y \times 3xy^2 = 6x^3y^3$$

9. In a room there are x^2 rows of chairs and each row contains $2x^2$ chairs. The total number of chairs in the room is

(a) $2x^3$

(b) $2x^4$

(c) x^4

(d) $x^4/2$

Solution:

The option (b) is correct answer.

We know that

Total number of chairs in the room = Number of rows \times Number of chairs

By substituting the values

Total number of chairs in the room = $x^2 \times 2x^2 = 2x^4$

10. $a^3 \times 2a^2b \times 3ab^5$ is equal to

(a) a^6b^6

(b) $23a^6b^6$

(c) $6a^6b^6$

(d) None of these

Solution:

The option (c) is correct answer.

It can be written as

$$a^3 \times 2a^2b \times 3ab^5 = 2 \times 3 \times a^3 \times a^2 \times a \times b \times b^5 = 6a^6b^6$$

