

OBJECTIVE TYPE QUESTIONS

PAGE: 5.18

Mark the correct alternative in each of the following:

1. Which of the following statement is true?

- (a) $-7 > -5$ (b) $-7 < -5$ (c) $(-7) + (-5) > 0$ (d) $(-7) - (-5) > 0$

Solution:

The option (b) is correct answer.

In option (a)

We know that -7 is to the left of -5

Hence, $-7 < -5$.

In option (c)

We know that $(-7) + (-5) = -(7 + 5) = -12$.

So -12 is to the left of 0

Hence $(-7) + (-5) < 0$.

In option (d)

$(-7) - (-5) = (-7) + (\text{additive inverse of } -5) = (-7) + (5) = -(7 - 5) = -2$

We know that -2 is to the left of 0 , so $(-7) - (-5) < 0$.

2. 5 less than -2 is

- (a) 3 (b) -3 (c) -7 (d) 7

Solution:

The option (c) is correct answer.

We know that, 5 less than $-2 = (-2) - (5) = -2 - 5 = -7$

3. 6 more than -7 is

- (a) 1 (b) -1 (c) 13 (d) -13

Solution:

The option (b) is correct answer.

We know that, 6 more than $-7 = (-7) + 6 = -(7 - 6) = -1$

4. If x is a positive integer, then

- (a) $x + |x| = 0$ (b) $x - |x| = 0$ (c) $x + |x| = -2x$ (d) $x = -|x|$

Solution:

The option (b) is correct answer.

We know that if x is positive integer, then $|x| = x$

Hence, $x + |x| = x + x = 2x$ and $x - |x| = x - x = 0$

5. If x is a negative integer, then

- (a) $x + |x| = 0$ (b) $x - |x| = 0$ (c) $x + |x| = 2x$ (d) $x - |x| = -2x$

Solution:

The option (a) is correct answer.

We know that x is negative integer, then $|x| = -x$

It can be written as

$x + |x| = x - x = 0$ and $x - |x| = x - (-x) = x + x = 2x$

6. If x is greater than 2, then $|2 - x| =$
 (a) $2 - x$ (b) $x - 2$ (c) $2 + x$ (d) $-x - 2$

Solution:

The option (b) is correct answer.

We know that if a is negative integer, then $|a| = -a$

It is given that x is greater than 2 where $2 - x$ is negative

Hence, $|2 - x| = -(2 - x) = -2 + x = x - 2$.

7. $9 + |-4|$ is equal to
 (a) 5 (b) -5 (c) 13 (d) -13

Solution:

The option (c) is correct answer.

We know that, $|-4| = 4$

Hence $9 + |-4| = 9 + 4 = 13$

8. $(-35) + (-32)$ is equal to
 (a) 67 (b) -67 (c) -3 (d) 3

Solution:

The option (b) is correct answer.

It can be written as $(-35) + (-32) = -(35 + 32) = -67$

9. $(-29) + 5$ is equal to
 (a) 24 (b) 34 (c) -34 (d) -24

Solution:

The option (d) is correct answer.

It can be written as $(-29) + 5 = -(29 - 5) = -24$

10. $|-|-7| - 3|$ is equal to
 (a) -7 (b) 7 (c) 10 (d) -10

Solution:

The option (c) is correct answer.

It can be written as $|-|-7| - 3| = |-7 - 3| = |-10| = 10$

11. The successor of -22 is
 (a) -23 (b) -21 (c) 23 (d) 21

Solution:

The option (b) is correct answer.

We know that if 'a' is an integer $a + 1$ is its successor.

So the successor of $-22 = -22 + 1 = -(22 - 1) = -21$

12. The predecessor of -14 is
 (a) -15 (b) 15 (c) 13 (d) -13

Solution:

The option (a) is correct answer.
The predecessor of -14 is -15 .

13. If the sum of two integers is -26 and one of them is 14 , then the other integer is

- (a) -12 (b) 12 (c) -40 (d) 40

Solution:

The option (c) is correct answer.
It is given that the sum of two integers $= -26$
One of them $= 14$
So the other integer $= -26 - 14 = -(26 + 14) = -40$

14. Which of the following pairs of integers have 5 as a difference?

- (a) $10, 5$ (b) $-10, -5$ (c) $15, -20$ (d) both (a) and (b)

Solution:

The option (d) is correct answer.
Consider option (a) $10 - 5 = 5$
Consider option (b) $(-5) - (-10) = -5 + 10 = 5$
Consider option (c) $15 - (-20) = 15 + 20 = 35$

15. If the product of two integers is 72 and one of them is -9 , then the other integers is

- (a) -8 (b) 8 (c) 81 (d) 63

Solution:

The option (a) is correct answer.
It is given that the product of two integers $= 72$
One of them $= -9$
Hence, the other integers $= 72 \div (-9) = -8$

16. On subtracting -7 from -14 , we get

- (a) -12 (b) -7 (c) -14 (d) 21

Solution:

The option (b) is correct answer.
It can be written as
Required number $= -14 - (-7) = -14 + 7 = -(14 - 7) = -7$

17. The largest number that divides 64 and 72 and leave the remainders 12 and 7 respectively, is

- (a) 17 (b) 13 (c) 14 (d) 18

Solution:

The option (b) is correct answer.
By subtracting 12 and 7 from 64 and 72
We get
 $64 - 12 = 52$ and $72 - 7 = 65$
So the required number is the HCF of 52 and 65 .
It can be written as
 $52 = 4 \times 13$ and $65 = 5 \times 13$
HCF 52 and $65 = 13$

Hence, the largest number that divides 64 and 72 and leave the remainder 12 and 7 respectively, is 13.

18. The sum of two integers is -23 . If one of them is 18, then the other is

- (a) -14 (b) 14 (c) 41 (d) -41

Solution:

The option (d) is correct answer.

It is given as the sum of integers = -23

One of them = 18

So the other number = $(-23) - (18) = -23 - 18 = -(23 + 18) = -41$

Hence, the other number is -41 .

19. The sum of two integers is -35 . If one of them is 40, then the other is

- (a) 5 (b) -75 (c) 75 (d) -5

Solution:

The option (b) is correct answer.

It is given that the sum of integers = -35

One of them = 40

So the other number = $(-35) - (40) = -35 - 40 = -(35 + 40) = -75$

Hence, the other number is -75 .

20. On subtracting -5 from 0, we get

- (a) -5 (b) 5 (c) 50 (d) 0

Solution:

The option (d) is correct answer.

We know that, $0 - (-5) = 0 + 5 = 5$

Hence by subtracting -5 from 0, we obtain 5.

21. $(-16) + 14 - (-13)$ is equal to

- (a) -11 (b) 12 (c) 11 (d) -15

Solution:

The option (c) is correct answer.

It can be written as $(-16) + 14 - (-13) = (-16) + 14 + 13 = (-16) + 27 = 27 - 16 = 11$

22. $(-2) \times (-3) \times 6 \times (-1)$ is equal to

- (a) 36 (b) -36 (c) 6 (d) -6

Solution:

The option (b) is correct answer.

It can be written as $(-2) \times (-3) \times 6 \times (-1) = (2 \times 3) \times 6 \times (-1) = 6 \times 6 \times (-1) = 36 \times (-1)$

So we get $(-2) \times (-3) \times 6 \times (-1) = -(36 \times 1) = -36$

23. $86 + (-28) + 12 + (-34)$ is equal to

- (a) 36 (b) -36 (c) 6 (d) -6

Solution:

The option (c) is correct answer.

It can be written as $86 + (-28) + 12 + (-34) = 86 + (-28) - (34 - 12) = 86 + (-28) - 22$

On further calculation

$$86 + (-28) + 12 + (-34) = (86 - 28) - (34 - 12) = 58 - 22 = 36$$

24. $(-12) \times (-9) - 6 \times (-8)$ is equal to

(a) 156

(b) 60

(c) -156

(d) -60

Solution:

The option (a) is correct answer.

It can be written as $(-12) \times (-9) - 6 \times (-8) = (12 \times 9) - 6 \times (-8) = 108 - 6 \times (-8)$

On further calculation

$$86 + (-28) + 12 + (-34) = 108 + 6 \times 8 = 108 + 48 = 156$$

