

Exercise 4.6

Question: 1

Which one of the following is the smallest whole number?

(a) 1 (b) 2 (c) 0 (d) None of these

Solution:

The set of whole numbers is $\{0, 1, 2, 3, 4, \dots\}$.

So, the smallest whole number is 0.

Hence, the correct option is (c).

Question: 2

Which one of the following is the smallest even whole number?

(a) 0 (b) 1 (c) 2 (d) None of these

Solution:

The natural numbers along with 0 form the collection of whole numbers.

So, the numbers 0, 1, 2, 3, 4, ... form the collection of whole numbers.

The number which is divisible by 2 is an even number.

So, in the collection "0, 1, 2, 3, 4, ...", 2 is the smallest even number.

Hence, the correct option is (c).

Question: 3

Which one of the following is the smallest odd whole number?

(a) 0 (b) 1 (c) 3 (d) 5

Solution:

The natural numbers along with 0 form the collection of whole numbers.

So, the numbers 0, 1, 2, 3, 4, ... form the collection of whole numbers.

A natural number which is not divisible by 2 is called an odd whole number.

So, in the collection "0, 1, 2, 3, 4, ...", 1 is the smallest odd whole number.

Hence, the correct option is (b).

Question: 4

How many whole numbers are between 437 and 487?

(a) 50 (b) 49 (c) 51 (d) None of these

Solution:

The whole numbers between 437 and 487 are 438, 439, 440, 441, ... , 484, 485 and 486. To find the required number of whole numbers,

We need to subtract 437 from 487 and then subtract again 1 from the result.

Thus, there are $(487 - 437) - 1$ whole numbers between 437 and 487.

Now, $(487 - 437) - 1 = 50 - 1 = 49$

Hence, the correct option is (b).

Question: 5

The product of the successor 999 and predecessor of 1001 is:

(a) one lakh (b) one billion (c) one million (d) one crore

Solution:

Successor of 999 = $999 + 1 = 1000$

Predecessor of 1001 = $1001 - 1 = 1000$

Now,

Product = (Successor of 999) \times (Predecessor of 1001)

= 1000×1000

= 1000000

= one million

Hence, the correct option is (c).

Question: 6

Which one of the following whole numbers does not have a predecessor?

(a) 1 (b) 0 (c) 2 (d) None of these

Solution:

The numbers 0, 1, 2, 3, 4, form the collection of whole numbers.

The smallest whole number is 0.

So, 0 does not have a predecessor.

Hence, the correct option is (b).

Question: 7

The number of whole numbers between the smallest whole number and the greatest 2 digit number is:

(a) 101 (b) 100 (c) 99 (d) 98

Solution:

Smallest whole number = 0

Greatest 2-digit whole number = 99

The whole numbers between 0 and 99 are 1, 2, 3, 4 97, 98.

To find the number of whole numbers between 0 and 99,

Subtract 1 from the difference of 0 and 99.

Therefore, Number of whole numbers between 0 and 99 = $(99 - 0) - 1$

= $99 - 1$

= 98

Hence, the correct option is (d).

Question: 8

If n is a whole number such that $n + n = n$, then $n = ?$

(a) 1 (b) 2 (c) 3 (d) None of these

Solution:

Here, $0 + 0 = 0$, $1 + 1 = 2$, $2 + 2 = 4$

So, the statement $n + n = n$ is true only when $n = 0$.

Hence, the correct option is (d).

Question: 9

The predecessor of the smallest 3 digit number is:

(a) 999 (b) 99 (c) 100 (d) 101

Solution:

Smallest 3-digit number = 100

Predecessor of 3-digit number = $100 - 1 = 99$

Hence, the correct option is (b).

Question: 10

The least number of 4 digits which is exactly divisible by 9 is:

(a)1008 (b)1009 (c)1026 (d)1018

Solution:

Least 4-digit number = 1000

The least 4-digit number exactly divisible by 9 is $1000 + (9 - 1) = 1008$.

Hence, the correct option is (a).

Question: 11

The number which when divided by 53 gives 8 as quotient and 5 as remainder is:

(a) 424 (b) 419 (c) 429 (d) None of these

Solution:

Here, Divisor = 53, Quotient = 8 and Remainder = 5.

Now, using the relation Dividend = Divisor x Quotient + Remainder

We get

$$\text{Dividend} = 53 \times 8 + 5$$

$$= 424 + 5$$

$$= 429$$

Thus, the required number is 429.

Hence, the correct option is (c).

Question: 12

The whole number n satisfying $n + 35 = 101$ is:

(a) 65 (b) 67 (c) 64 (d) 66

Solution:

Here, $n + 35 = 101$.

Adding -35 on both sides, we get

$$n + 35 + (-35) = 101 + (-35)$$

$$n + 0 = 66$$

$$n = 66$$

Hence, the correct option is (d).

Question: 13

The value of $4 \times 378 \times 25$ is:

(a) 37800 (b) 3780 (c) 9450 (d) 30078

Solution:

By regrouping, we get

$$4 \times 378 \times 25 = 4 \times 25 \times 378$$

$$= 100 \times 378$$

$$= 37800$$

Hence, the correct option is (a).

Question: 14

The value of $1735 \times 1232 - 1735 \times 232$ is:

(a) 17350 (b) 173500 (c) 1735000 (d) 173505

Solution:

Using distributive law of multiplication over subtraction, we get

$$\begin{aligned}1735 \times 1232 - 1735 \times 232 &= 1735 (1232 - 232) \\ &= 1735 \times 1000 \\ &= 1735000\end{aligned}$$

Hence, the correct option is (c).

Question: 15

The value of 47×99 is:

(a) 4635 (b) 4653 (c) 4563 (d) 6453

Solution:

Since, $99 = 100 - 1$

Therefore, $47 \times 99 = 47 \times (100 - 1)$

$$= 47 \times 100 - 47$$

$$= 4700 - 47$$

$$= 4653$$

Thus, the value of 47×99 is 4653.

Hence, the correct option is (b).

