

RD SHARMA

Solutions

Class 6 Maths

Chapter 4

Ex 4.6

Mark the correct alternatives in each of the following:

Q1. 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).

Q2. 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).

Q3. 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).

Q4. 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).

Q5. 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) x (Predecessor of 1001)

= 1000×1000

= 1000000

= one million

Hence, the correct option is (c).

Q6. 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).

Q7. 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).

Q8. 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).

Q9. 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).

Q10. 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).

Q11. 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 \times 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).

Q12. 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).

Q13. 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).

Q14. 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

$$1735 \times 1232 - 1735 \times 232 = 1735 (1232 - 232)$$

$$= 1735 \times 1000$$

$$= 1735000$$

Hence, the correct option is (c).

Q15. 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).