

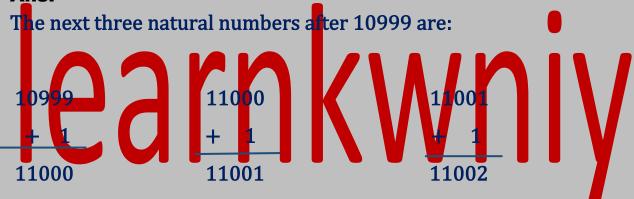


# CLASS 6TH CANALLY CHAPTER- 2<sup>nd</sup> WHOLE NUMBERS

### EXERCISE- 2.1 NCERT SOLUTION

Question 1. Write the next three natural numbers after 10999.

### Ans:



Question 2. Write three whole numbers occurring just before 10001.

### Ans:

Hence, three whole numbers just before 10001 are 10000, 9999 and 9998.

### **Question 3. Which is the smallest whole number?**

### Ans:

0 is the smallest whole number.

### **Question 4. How many whole numbers are there between 32** and 53?

### Ans:

The whole numbers between 32 and 53 are 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, and 52.

So, there are 20 whole number between 32 and 53.

Question 5. Write the successor of:

Successor of 244070 is

$$\frac{+1}{244071}$$

### (b) 100199

### Ans:

Successor of 100199 is

$$=$$
  $\frac{+1}{100200}$ 

(c) 1099999

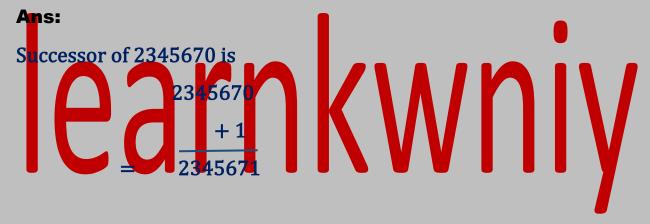
Ans:

Successor of 1099999 is

1099999

+1 1100000

(d) 2345670



### **Question 6. Write the predecessor of:**

(a) 94

Ans:

Predecessor of 94 is

94

**-** 1

= 93

(b) 10000

Predecessor of 10000 is

10000

<u>-1</u>

= 9999

(c) 208090

Ans:

Predecessor of 208090 is



Predecessor of 7654321 is

7654321

 $\frac{-1}{=7654320}$ 

Question 7. In each of the following pairs of numbers, state which whole number is on the left of the other number on the number line? Also write them with the appropriate sign

(>, <) between them.

(a) 530, 503

### Ans:

530 > 503

Hence, 503 will appear on the left side of 530 on number line.

(b) 370, 307

### Ans:

370 > 307
Hence, 307 will appear on the left side of 370 on number line.

(c) 98765, 56789

Ans:
98765 > 56789

Hence, 56789 will appear on left side of 98765 on number line.

(d) 9830415, 10023001

### Ans:

10023001 > 9830415

Hence, 9830415 will appear on the left side of 10023001 on the number line.

Question 8. Which of the following statements are true (T) and which are false (F)?

(a) Zero is the smallest natural number.

Ans:

**False** 

(b) 400 is the predecessor of 399.

Ans:

(c) Zero is the smallest whole number.

Ans:
True

(d) 600 is the successor of 599.

Ans:

True

(e) All natural numbers are whole numbers.

Ans:

**True** 

(f) All whole numbers are natural numbers. Ans: **False** (g) The predecessor of a two-digit number is never a singledigit number. Ans: **False** (h) 1 is the smallest whole number. Ans: False (i) The natural number 1 has no predecessor. Ans: True (j) The whole number 1 has no predecessor. Ans: **False** (k) The whole number 13 lies between 11 and 12. Ans:

**False** 

(I) The whole number 0 has no predecessor.

Ans:

True

(m) The successor of a two-digit number is always a two-digit number.

Ans:

**False** 



**Question 1. Find the sum by suitable arrangement:** 

(a) 837 + 208 + 363

Ans:

837 + 208 + 363

$$=(837+363)+208$$

$$= 1200 + 208$$

= 1408

### (b) 1962 + 453+ 1538 + 647

### Ans:

$$1962 + 453 + 1538 + 647$$

$$= (1962 + 1538) + (453 + 647)$$

$$=3500+1100$$

**=4600** 

### Question 2. Find the product by suitable arrangement:

### (a) $2 \times 1768 \times 50$

2 x 1768 x 50

$$= (2 \times 50) \times 1768$$

= 176800

### (b) 4 x 166 x 25

### Ans:

$$= 166 \times (25 \times 4)$$

$$= 166 \times 100$$

= 16600

### (c) 8 x 291 x 125

### Ans:

8 x 291 x 125

- $= (8 \times 125) \times 291$
- $= 1000 \times 291$
- =291000

### (d) $625 \times 279 \times 16$

### Ans:



### (e) 285 x 5 x 60

### Ans:

285 x 5 x 60

- $= 285 \times (5 \times 60)$
- $= 285 \times 300$
- =85500

### (f) 125 x 40 x 8 x 25

125 x 40 x 8 x 25

- $= (125 \times 8) \times (40 \times 25)$
- $= 1000 \times 1000 = 1000000$

### **Question 3. Find the value of the following:**

(a)  $297 \times 17 + 297 \times 3$ 

### Ans:

297 x 17 x 297 x 3

 $= 297 \times (17 + 3)$ 

 $=297 \times 20$ 

**= 5940** 



- $= 54279 \times (92 + 8)$
- $= 54279 \times 100$
- = 5427900

### (c) 81265 x 169 - 81265 x 69

### Ans:

81265 x 169 - 81265 x 69

- $= 81265 \times (169 69)$
- $= 81265 \times 100$
- = 8126500

### (d) 3845 x 5 x 782 + 769 x 25 x 218 Ans:

 $3845 \times 5 \times 782 + 769 \times 25 \times 218$ 

- $= 3845 \times 5 \times 782 + 769 \times (5 \times 5) \times 218$
- $= 3845 \times 5 \times 782 + (769 \times 5) \times 5 \times 218$
- $= 3845 \times 5 \times 782 + 3845 \times 5 \times 218$
- $= (3845 \times 5) \times 782 + (3845 \times 5) \times 218$
- $= 3845 \times 5 \times (782 + 218)$
- $= 3845 \times 5 \times 1000$
- $= 19225 \times 1000$
- = 19225000

Question 4. Find the product using suitable properties.

(a)  $738 \times 103$ Ans  $738 \times 100 + 3$   $738 \times 100 + 738 \times 3$ 

/38 X 100 + /38 X 3

Using distributive property

- =73800 + 2214
- = 76014

(b) 854 x 102

Ans:

854 x 102

```
= 854 \times (100 + 2)
```

Using distributive property

$$= 854 \times 100 + 854 \times 2$$

$$= 85400 + 1708$$

= 87108

### (c) 258 x 1008

### Ans:

258 x 1008



### (d) 1005 x 168

### Ans:

1005 x 168

$$= (1000 + 5) \times 168$$

$$= 1000 \times 168 + 5 \times 168$$

Using distributive property

$$= 168000 + 840$$

$$= 168840$$

Question 5. A taxi driver filled his car petrol tank with 40 litres of petrol on Monday. The next day, he filled the tank with 50 litre of petrol. If the petrol cost Rs. 44 per litre, how much did he spend in all on petrol?

Ans:

Petrol filled on Monday = 40 litre

Petrol filled on Tuesday = 50 litre

Cost of petrol = Rs. 44 per litre

 $\therefore$  Total money spent = Rs. (40 x 44 + 50 x 44)

 $= Rs. (40 + 50) \times 44$ 

 $= 90 \times 44$ 

= Rs. 3960

Question 6. A vendor supplies 32 litres of milk to a hotel in the morning and 68 litres of milk in the evening. If the milk costs Rs. 15 per litre, how much money is due to the vendor per day?

### Ans:

Milk supplied in the morning = 32 litres

Milk supplied in the evening = 68 litres

Cost of milk = Rs. 15 per litre

$$= 32 \times 15 + 68 \times 15$$

$$=15 \times (32 + 68)$$

$$=15 \times 100$$

$$= Rs. 1500$$

### **Question 7. Match the following:**

(i) 425 x 136 = 425 x (6 + 30 + 100)	Commutativity under multiplication
(ii) 2 x 49 x 50 = 2 x 50 x 49	Commutativity under addition
(iii) 80 + 2005 + 20 = 80 + 20 + 2005	Distributivity of multiplication over addition



### Question 1. Which of the following will not represent zero:

$$(a) 1 + 0$$

### Ans:

$$1 + 0 = 1$$

 $1 \neq 0$ , hence does not represent as zero.

(b)  $0 \times 0$ 

$$0 \times 0 = 0$$

Hence, it represents as zero.

(c) 0 / 2

### Ans:

$$0/2=0$$
,

Hence it represents as zero.

(d) (10-10) / 2

### Ans:

$$(10-10)/2=02=0$$

Hence it represents as zero.

Question 2. If the product of two whole numbers is zero, can we say that one or both of them will be zero? Justify through examples.

### Ans:

Yes, Examples:

The product of two whole numbers is zero if one of them will be zero

$$1 \times 0 = 0$$

$$0 \times 10 = 0$$

The product of two whole numbers is zero, if both of them will be zero

$$0 \times 0 = 0$$

Question 3. If the product of two whole numbers is 1, can we say that one or both of them will be 1? Justify through examples.

### Ans:

This is true only when each of the number are 1.

$$1 \times 1 = 1$$

### **Question 4. Find using distributive property:**

(a) 728 x 101

### Ans:



### (b) 5437 x 1001

### Ans:

5437 x 1001

- $= 5437 \times (1000 + 1)$
- $= (5437 \times 1000) + (5437 \times 1)$
- = 5437000 + 5437
- = 5442437

### (c) 824 x 25

$$= 824 \times (20 + 5)$$

$$= (824 \times 20) + (824 \times 5)$$

$$= 16480 + 4120$$

$$=20600$$

### (d) 4275 x 125

### Ans:

4275 x 125

$$= 4275 \times (100 + 20 + 5)$$

$$= (4275 \times 100) + (4275 \times 20) + (4275 \times 5)$$

### (e) 504 × 35

### Ans:

 $504 \times 35$ 

$$= (500 + 4) \times 35$$

$$= (500 \times 35) + (4 \times 35)$$

$$= 17500 + 140$$

$$= 17640$$

### **Question 5. Study the pattern:**

$$12 \times 8 + 2 = 98$$

$$123 \times 8 + 3 = 987$$

1234 x 8 + 4 = 9876 12345 x 8 + 5 = 98765 Write the next two steps.

### Ans:

Step I:  $123456 \times 8 + 6 = 987654$ Step II:  $1234567 \times 8 + 7 = 9876543$ 

## learnkwniy