

Chapter No: 2

Whole Numbers (W)

- ① Natural numbers $(N) \{1, 2, 3, 4, 5, 6, \dots\}$
- ② Whole numbers $(W) \{0, 1, 2, 3, 4, 5, \dots\}$

Whole numbers (W)

The Natural Numbers along with 0 (ZERO) from the collection of whole Numbers.

predecessor Number: $W = \{0, 1, 2, 3, 4, 5, \dots\}$

Note:

- 1) predecessor Number of 17 = 16
- 2) predecessor Number of 99 = 98
- 3) predecessor Number of 1000 = 999

Successor Number:

Note:

- 1) Successor Number of 99 = 100
- 2) Successor Number of 5 = 6
- 3) Successor Number of 18 = 19

Exercise: 2.1

- ① write the next three Natural numbers after: 10,999.
sol: Next three Natural number after 10,999 = 11,000, 11,001, 11,002
- ② write three whole numbers occurring just before 10001.
sol: Given number = 10,001
9,999, 9,999, 10,000

David 18/7/24

199
+
11,000

③ Which is the Smallest whole number.

① So, Smallest number in whole numbers = 0 (ZERO)

④ How many whole numbers are there between 32 and 53?

① So, between the whole numbers of 32 and 53

33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52

Total Numbers = 20

⑤ Write the Successor of:

(a) 2440701: Successor Number of 2440701 = 2440702

(b) 1,00,199 = ~~1,00,200~~ Successor Number of 1,00,199 = 1,00,200

(c) 1,99,999 = Successor Number of 1,99,999 = 2,00,000

(d) 23,45,670 = Successor Number of 23,45,670 = 23,45,671

~~19,99,999~~
~~19,99,999~~

(6) Write the predecessor of:

(a) 94

So, predecessor of 94 = 93

(b) 10,000

So, predecessor of 10,000 = 9,999

(c) 2,08,090

So, predecessor of 2,08,090 = 2,08,089

(d) 76,54,321

So, predecessor of 76,54,321 = 76,54,320

Number line:

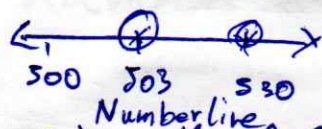
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Number line

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

(a) 530, 503

sol

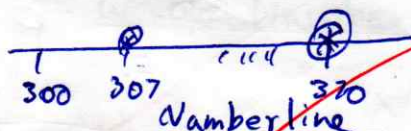


503 is on the left of 530

$$503 < 530$$

(b) 370, 307

sol



307 is on the left of 370

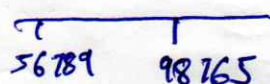
$$370 > 307$$

(c) 98765, 56789

sol

56789 is on the left of 98765

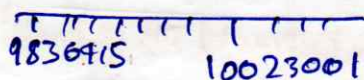
$$98765 > 56789$$



Number line

(d) 9830415, 10023001

sol



9836415 is on the left of 10023001.

$$9836415 < 10023001$$

9) Which of the following Statements are (True) and which are (F)?

- (a) Zero is the Smallest Natural Number. (F)
- (b) 400 is the predecessor of 399. (F)
- (c) Zero is the Smallest whole Number. (T)
- (d) 600 is the Successor of 599. (T)
- (e) All natural Numbers are whole numbers. (T)
- (f) All whole numbers are ^{Natural} numbers. (F)
- (g) The predecessor of a two digit Number is never a Single digit number. (F)
- (h) 1 is the Smallest whole number. (F)
- (i) The natural number 0 has no predecessor. (T)
- (j) The whole number 1 has no predecessor. (F)
- (k) The whole number 13 lies between 11 and 12. (F)
- (l) The whole number 0 has no predecessor. (T)
- (m) The Successor of a two digit Number is always a two digit Number. (F)

Addition of whole Numbers on Number line

Example ①

$$3 + 4$$



$$\therefore 3 + 4 = 7$$

Example ②

2 + 5 Add on number line

Sol:



$$\therefore 2 + 5 = 7$$

$$\begin{array}{r} 26724 \\ \times 2 \\ \hline 53448 \end{array}$$

$$51 = 8 \times 6$$

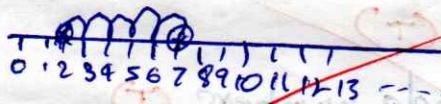
$$18 = 4 \times 5$$

Subtraction on Number line:-

Example 0

Find $7-5$ on the Number Line

Sol



$$\therefore 7-5=2$$

Example
Sol

Find $5-2$ on the number line

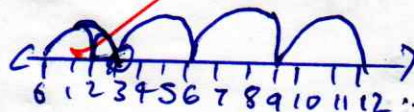


$$\therefore 5-2=3$$

Multiplication on the Number line

Example

Find 4×3 on the Number line



$$\therefore 4 \times 3 = 12$$

Example

Find 2×4 on the Number line



$$\therefore 2 \times 4 = 8$$