
RABINDRANATH WORLD SCHOOL
GURGAON
विवेक और ज्ञान
12x5
x+y

CLASS -6
CHAPTER-2
Whole Numbers

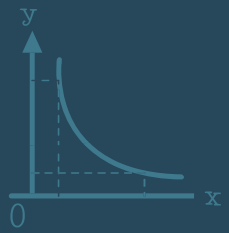
Whole Numbers

- Whole numbers are the set natural numbers including with zero. 0 is the smallest whole number. Whole numbers are 0, 1, 2, 3,....

Properties of Whole Numbers

- Addition and multiplication of any 2 whole number give a whole number.

- Subtraction and division of any 2 whole number may or may not give a whole number.



Predecessor and Successor

Examples

a) 98742

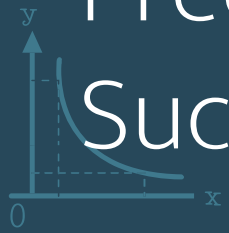
Predecessor = 98742 - 1 = 98741

Successor = 98742 + 1 = 98743

b) 7869

Predecessor = 7869 – 1 = 7868

Successor = 7869 + 1 = 7870



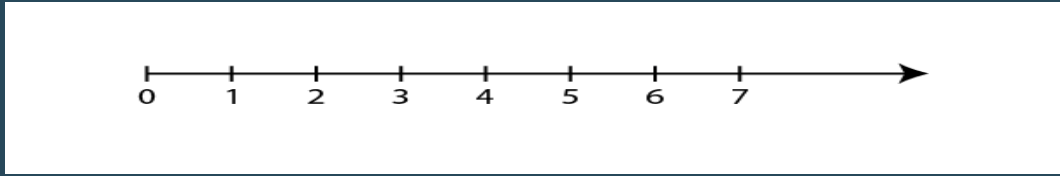
Where Do Whole Numbers Live?

2+2=4

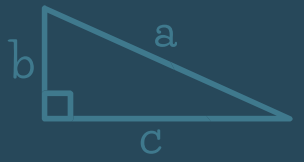
Number Line

It is the infinitely long line containing all the whole numbers.

$\sqrt[n]{x}$

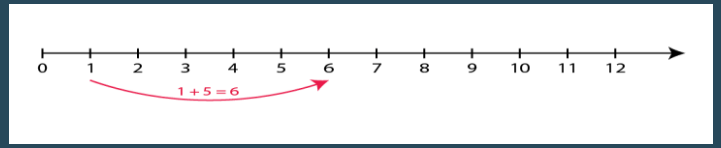


x/2y

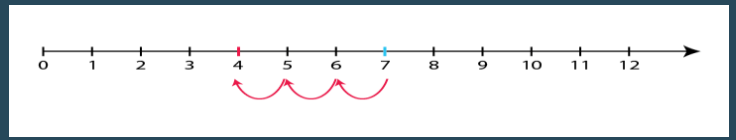


Operations on a number line

1)**Addition on a number** line-For example, addition of 1 and 5 (1 + 5 = 6). First, locate 1 on the number line. Then move 5 places to the right will give 6.



2)**Subtraction on a number line-** For example, subtraction of 3 from 7 (7 – 3 = 4). First, locate 7 on the number line. Then move 3 places to the left will give 4.



Properties of Operators: Commutative Associative and Distributive

2+2=4

1)Commutative property

For e.g: $2 + 3 = 5 = 3 + 2$, $3 \times 4 = 12 = 4 \times 3$

2)Associative property

For eg: $(5 + 6) + 4 = 15 = 5 + (6 + 4)$

3)Distributive Property

$4 \times (5 + 3) = (4 \times 5) + (4 \times 3) = 20 + 12 = 32$

4)Additive Identity

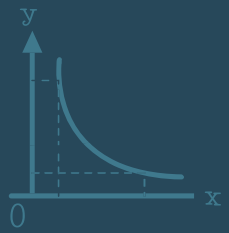
Zero is the additive identity as $a + 0 = a$

5)Multiplicative identity

1 is the Multiplicative identity as $a \times 1 = a$

x

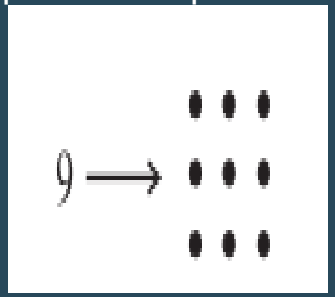
y



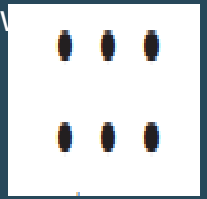
PATTERNS

1) Express as line. E.g : 5 = •••••

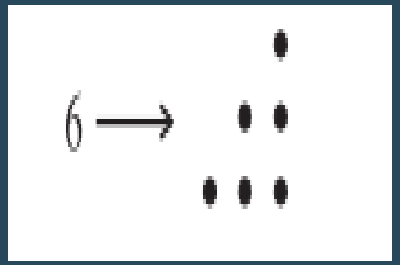
2) Express as Square.

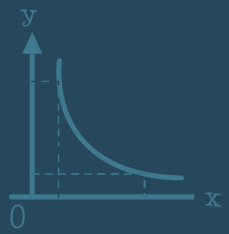


3) Express as Rectangle.
6 can be shov



4) Express as Triangles.

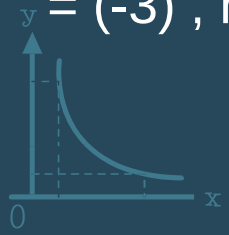




Properties of Operators: Closure Properties

1)Whole numbers are closed under addition and also under multiplication.eg. 3 + 1 = 4,a whole number, 4 x 4 = 16,a whole number.

2)Whole numbers are **not** closed under subtraction and division.eg. 5 – 8 = (-3) , not a whole number , 9/2 is not a whole number.



Math is fun!

THANKYOU

2+2=4

$\sqrt[n]{x}$

x/2y