District Public School and College Depalpur

Summer Task / Home Assignment

SESSION 2020-2021
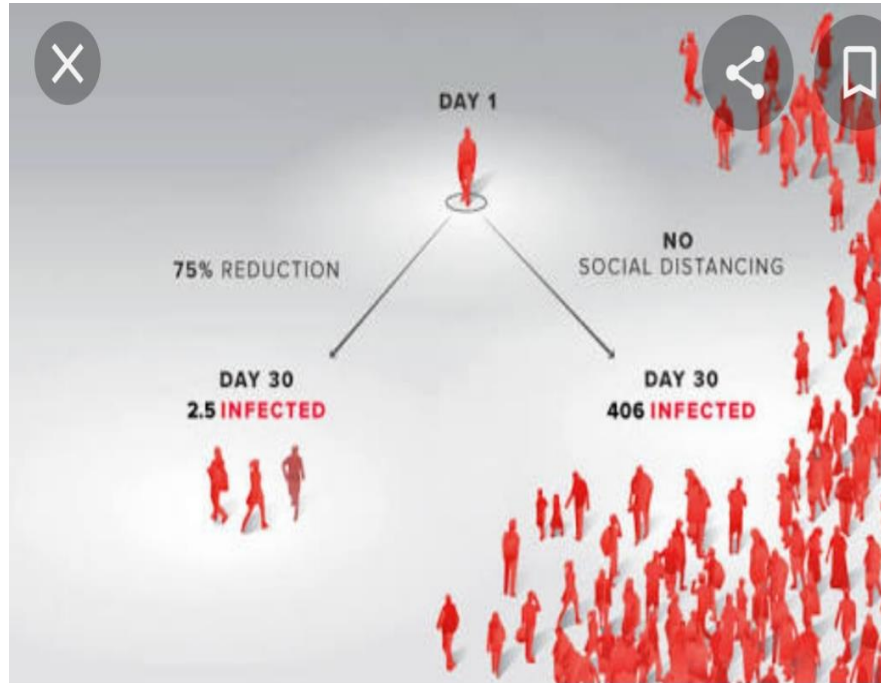
Subject : Mathematics

Class 6

Student Name : _____

Section : _____

Covid -19 Corona virus

There are currently 7,460,415 confirmed cases and 419,049 deaths from crona virus covid– 19 out   break as june 11,2020,06:46 GMT

Safety Measure

Q1) When corona start in china first?

Ans)_____

Q2) When corona start in Pakistan first?

Ans)_____

Q3) Approximately how many people are infected with this disease in Pakistan?

Ans)_____

Q4) Can corona patient survive or not?

Ans)_____

Topic:Introduction of Mathematics

Web Link: https://www.youtube.com/watch?v=kl5NIJKeHFs&t=104s

Definition of Mathematics:

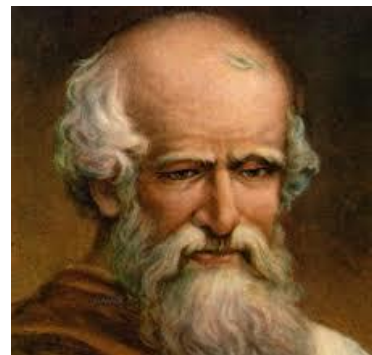" Mathematics is the study of numbers, shapes and pattern".

The Word Mathematics come from the Greek word Mathema which means that "Science, Knowledge and Learning".

Sometimes the word mathematics shortened to math (in the United State and Canada) which means number, how things can be counted.

Father of Mathematics:

A Greek mathematician

Archimidies is the father of mathematics.

Branches of mathematics:

There are four branches of mathematics.

1. Addition(+)
2. Subtraction(-)
3. Multiplication(×)
4. Division(÷)

Definition of Mathematics:

_____

_____

_____

Father of Mathematics:

_____

Branches of mathematics:

_____

_____

_____

UNIT 1

SETS

Q :1   Fill in the blanks

1) One-to-one correspondence can not established between _____sets.

2) _____means a specific property of an object that enables it to be an element of a set

3) The symbol _____means   belong to

4)_____set is also known as empty

5) The symbol _____ is used for two equal

Q: 2   Tick the correct answer

1) To represent two equal sets, we use the symbol:

 (a) $\leftrightarrow$ (b) $\geq$ (c) $\neq$ (d) =

2) To write an empty set , we use the symbol:

(a) $\in$ (b) $\pm$ (c) ϕ (d) $\leftrightarrow$

3) If A=set of vowels, then:

(a) b ∈ A   (b) c ∈ A   (c) u ∈ A   (d) v ∈ A

4) {11} is known as:

(a) null set   (b) singleton set   (c) subset   (d) power set

5) To represents the equivalent sets, we use the symbol:

 (a) =   (b) ∈   (c) ↔   (d) ≠

Important   definition

SETS :

A   collection of well-defined and   distinct object .

subset :

if each element of a set A is also an of element of set B then the set A is called the subset of the set B   which is denoted by the symbol ⊆

super set   :

if A ⊆B,then the set B is called the superset of set A .i.e. B⊇A then can read as the set B is the super set of set A

finite - Infinite set :

A set having a finite number of elements is called a finite set and a set having unlimited number of elements is called an infinite set .

singleton set :
A set having a single element is called a singleton set . **empty set :** A set having no element is called empty set.

Date : 18 june , 2020   Day : Thursday

Unit : 1 Set

Introduction :In our daily life we observe the word water set, tea set ,dinner set, sofa set, a set of books , a set of colour and so on. But in mathematics the word set has broader meaning because it provide us a way to integrate the different branches of mathematics

Set:

> Set is a collection of distint and well define object.

Well define:

> Means specific property of an object that enable it to an element of set or not.

Distinct:

> Distinct same object should not appear more than once.

George Cantor gave the proper idea of set in 19 century .

Q: Write any five sets in your daily life.

_____

_____

_____

Learn and write table 2

Date : 19 June,2020   Day: Friday

Weblinks :

Exercise : 1.1

Topic : Set

Q:1   Which statement is set or not ?

- The five provinces of Pakistan .

   It is set .

- The difficult question of test

   It is not set .

- The naughty boy of class .
   _____-.
- The sharp boy of school .
   _____
- The whole number less than 9 .

   _____
- The geometrical instruments.

   _____

- The player of Pakistan cricket team .

   _____

Q:2 If A={a,e,i,o,u} and B={a,b,c.........z}then which of following statements are true and false ?

- a $\in A$:   True
- d $\notin$ A :   False
- c $\in$ B :   True

Q: 3 which following statements are true and false .

i $\in$ A

Ans :_____

f $\in$ A

Ans :_____

x $\notin$ A

Ans:_____

Learn and Write Table of 3

Date :20 June 2020   Day:Saturday

Exercise 1.1

Topic: Sets

Q: 3 Fill in blanks by using ∉ and ∈ .

    i.   1 ∉ { 2, 3}

    ii.   B ∈ {a,b,c}

    iii. 15_____the set of counting numbers

    iv. O_____ the set of whole numbers.

    v.   B_____ the set of small letters of English alphabet

Q: 4 Write the following statement into the symbolic form .

    I.   0 is an element of set w

  Ans   0 ∈ w

   II.   *Lahore is member of set P*

  Ans   Lahore ∈ P

  Ans _____

   III.   Sindh does not belong to set B

  Ans_____

   IV.   is not an element of set E

Ans_____-

ᵛ Potato is an element of set v

Ans_____

Learn and write table of 4:

Date 22 june ,2020   Day: Monday

Exercise 1.1

Topic : Set

Q:5 Which following collection are not set and why?

- A= { b,a,n,k}
  It is set because their object are well defined and distinct.
- D= {k,i,l,l,e,r}
  It is not set because their objects are not distinct .
- F ={ 9,3,5,1}

  Ans_____

- J= the set of students in the 7 class
  Ans_____

Q:6 List the element of following set .

- The set of five countries.
  Pakistan , India , Afghanistan ,Iran , China
- The set of three games .
  Hockey , Cricket , Football
- The set   vowels
  Ans)_____

- The set last four months
  Ans)_____

- The set of three Islamic month

  Ans_____
- The set seven days of the week

   Ans_____
- The set the colours of Pakistan s flag

  Ans_____

Learn and write table of 5

Date 23, june   Day :Tuesday

Exercise 1.2

Topic : Set

Q :1   Write set into descriptive form .

A = { 1,2,3,4,5,6}

The set of natural number less than 7.

B = {0,1,2 .... 99}

Set of whole number less than 100.

E ={2,4,6 -----}

Ans_____

W= {0,1,2,3----}

Ans _____

Q :2 Write set into tabular form .

Set of 4 domestic animals .

{cat , dog , cow , goat }

Set of 5 birds .

{ sparrow,crow,parrot,pigeon,cuckoo}

The set of five famous cities

Ans

Learn and write table 6

Date 24 june,2020   Day :wednesday

Exercise : 1.3

Topic : Set

Q:1 Which of following set is the empty set ?

- The set of whole number less 1

    Not empty

- The set of vowels other a and o

     Ans

- The set of natural number less than 1

      Ans

Q :2 Separate the infinite set from the following

A= the set of natural numbers

   Infinite set

D= { Islamic months }

Ans _____

F= { c,f,I,m,o,r,u}

 Ans _____

E = { 3,6, 9,---}

Ans_____

A ={Letter of word halla gulla}

Ans_____

Learn and write table 7

Weblink : https://www.youtube.com/watch?v=9M7Lqrqz-8c&t=6s

Eercise 1.3

Topic : Set

Q :1   Find that pairs of sets are equivalent or non _ equivalent .

A={0,1,2,3,4}   B={1,2,3,4,5}

A={0,1,2,3,4}

↕↕↕↕↕

B={1,2,3,4,5}   Equivalent set

It is possible to establish the one to one correspondence between set A & B .

- IF A= { 1,2}   B={1,2,3}

Q :4 Which pair of set are equal sets ?

A= {a,b,c,d,e}

B= {b,a,e,d,c}   Equal set

We can examine that each element of set A is also an element of B.

- IF A= The set of even numbers less than 9

B={0,2,4,6,8}

Learn and write table of 8

Weblink: https://www.youtube.com/watch?v=5OcPpuYBlyk

Exercise : 1.3

   Topic : Set

Q: 5   IF A= { a, b ,c} , b= { b,c,d}, c= {c,d,e} and d= {a,b,c,d} then:

Which of the following statement are true?

- A ⊂ B

    false

- B ⊂ D
  True

- C ⊂ D
  _____

- A ⊂ D
  _____

- B ⊂ C
  _____

- C ⊂ A
  _____

Learn and write table of 9

Date 27 june, 2020   Day:suturday

Weblink: https://www.youtube.com/watch?v=ijwp1YbZxt4

Unit no 2: Whole number

Topic: Definations of whole numbers

Introduction:

       In our day to day life , we often come across the situations where we have to count objects.

       Thus, we obtain the numbers one , two , three ,four, five etc which are denoted by the

 different symbols as shown below .

$$1 , 2, 3, 4, 5, 6 ,7, 8 , 9 …………$$

Natural numbers :

       The number 1,2,3……. That we use for counting the objects are called the counting numbers or natural numbers.

       N= {1,2,3,4……}

Whole numbers:

       The number 0 together with natural or counting numbers gives us the whole numbers.

       W={0,1,2,3,4………}

Learn and write table 10

Date 29, june 2020   Day: Monday

Weblinks:

Exercise 2.1

Topic whole numbers

Q: 1 Write successor and predecessor of following whole number .

- 36

Predecessor : 35

Successor : 37

- 74 _____
- 199_____

Q:2 Write three next consecutive whole numbers starting from 509 .

510, 511, 512 .

Q: 3 Write the natural number smaller than 6 .

Q: 4 Which number is greater

- 345 < 435
- 889 __989
- 13791_____13971

Learn and write table 11.

Date: 30 ,june   Day:Tuesday

Exercise 2.1

Topic : Whole number

Q: 5   Write the whole numbers .

- < 15 but > 9 .

10, 11, 12, 13, 14

- ≥ 5

_____

- ≤ 11

_____

- ≥48 but≤ 51

_____

Learn and write table 12.

Date: 1, july 2020   Day:Wednesday

Weblink :

Exercise : 2.1

Topic: number line

Q :6   Draw the number line to represent the whole numbers

0 , 3,5, and 9

< 5

Q : 7 Find sum by using number line

- 2 and 9

_____

Learn and   write   Table   of   13

Date:2 july 2020   Day :Thursday

Weblink

Exercise : 2.2

Topic : Addition and subtraction of whole numbers

Q :1   Addition and subtraction of whole numbers.

Evalute:

- 4096 + 4833

```
  4 0 9 6
+ 4 8 3 3
_____
  8 9 2 9
_____
```

- 5121_2674

```
  5 1 2 1
_  2 6 7 4
_____
_____
```

Q : 2   Correct digit with in blanks.

- _ 4 3
  + 2 5 _

Learn and write table of 14

Date :3 july 2020   Day:Friday

Exercise 2.2

Topic : Addition and subtraction of whole number .

Q:3 Find the sum of first five whole number .

Ans : first five whole numbers :0, 1, 2, 3, 4.

Sum :

$$0 + 1 + 2 + 3 + 4$$

$$= 10$$

Q : 4 Find the sum of smallest three digit number and largest two digit number.

Ans :

Learn and write table 15

Date : 4,july 2020   Day: Saturday

Exercise : 2.3

Topic : Laws of addition

Q : 1 Fill the blanks with the help of commutative and associative law .

- $14 + 9 = 9 + 14$

- $(5 + 7) + 9 = \_\_ + (\_\_ + \_\_)$

- $(5 + \_) + 15 = \_ + (10 + 15)$

- $11 + \_ = 13 + \_$

- $(3 + \_)) + \_\_ = \_\_ + (10 + 15)$

Learn and write table 16