

Name \_\_\_\_\_  
(Class-VI)

Roll No. \_\_\_\_\_

# Directorate of Education

Govt. of NCT of Delhi

Worksheets for the Session 2012-2013

Subject : Mathematics

Class : VI

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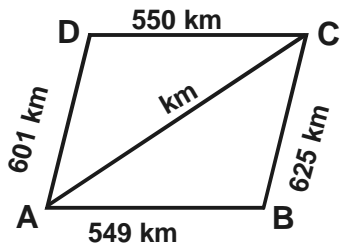
GGSSS Samaipur

# Worksheet - 1

## Class VI

### Chapter - 1 (Knowing Our Numbers)

1. Fill in the blank
  - i) The number name of 8090056 is \_\_\_\_\_.
  - ii) The greatest number of 8 digits using 3, 0, 1, 8 is \_\_\_\_\_.
  - iii) Sum of x and L in numerals is \_\_\_\_\_.
2. Match the place value of 4 in each case.
  - i) 1450916                      4000
  - ii) 4802357                    400000
  - iii) 33234901                4000000
3.
  - i) 10 Lakh means
    - a) 1 million              b) 10 million              c) 100 million              d) 1000 million
  - ii) CXXV write in Hindu-Arabic numeral is
    - a) 25                      b) 125                      c) 135                      d) 105
  - iii) 2315 when rounded to the nearest tens is
    - a) 2310                      b) 2320                      c) 2300                      d) 2316
4. Write your Date of Birth in Roman Numerals \_\_\_\_\_.
5. Estimates : 8325 - 491
6. In given figure, find distance in kilometers.



- a) from C to A through B.
- b) from A to d.

Activity : Write your Date of Birth in given column below

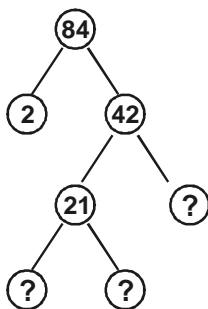
DATE		MONTH		YEAR			

- i) Write the name according to Indian System
- ii) Write name according to International System

1. Fill in the blank
  - i) Two consecutive predecessors of 4010 are \_\_\_\_\_& \_\_\_\_\_.
  - ii) Smallest whole number is \_\_\_\_\_.
  - iii) Additive identity of whole number is \_\_\_\_\_.
  - iv) Successor of 99 is \_\_\_\_\_.
  - v)  $10000 \times 0 =$  \_\_\_\_\_.
2. Match the following
  - i) Commutative property over addition
  - ii) Commutative property over multiplication
  - iii) Distributive property of multiplication over addition
  - a)  $a \times (b+c) = a \times b + a \times c$
  - b)  $a+(b+c) = (a+b)+c$
  - c)  $a \times (b \times c) = (a \times b) \times c$
3. MCQ
  - i) Predecessor of natural number 1.
    - a) 0
    - b) 2
    - c) 10
    - d) doesnot exist
  - ii) Find the value of  $(1063 \times 127 - 1063 \times 27)$ 
    - a) 100000
    - b) 106300
    - c) 839700
    - d) None
  - iii)  $5 \div 0$  gives.
    - a) 5
    - b) 0
    - c) Not defined
    - d) None
  - iv) How many whole numbers are there between 53 and 72.
    - a) 18
    - b) 19
    - c) 20
    - d) 17
4. Solve :-
  - i) Find  $3+5$  using number line.
  - ii) Find by using suitable property
    - i)  $8 \times 475 \times 125$
    - ii)  $225 \times 102$

**Worksheet - 3**  
**Class VI**  
**Chapter - 3 (Playing with Numbers)**

1. Fill in the blank
  - i) \_\_\_\_\_ is a factor of every number.
  - ii) Only even prime number is \_\_\_\_\_.
  - iii) If sum of digits of a number is divisible by 9 then number is divided by \_\_\_\_\_.
2. Match the following
  - i) A number which is exactly divisible by 2                      odd numbers
  - ii) A number which is not exactly divisible by 2                  even numbers
  - iii) A natural number greater than 1 which has no factors except 1 and itself.                  prime numbers
3. Put (    ) on correct answer.
  - i) The smallest prime number is
    - a) 1                      b) 2                      c) 3                      d) -1
  - ii) Which of these number is divisible by 2, 10, 5.
    - a) 3240                  b) 6215                  c) 8102                  d) 2341
  - iii) HCF of 11 and 77 is
    - a) 11                      b) 77                      c) 7                      d) 1
4. Write first five multiples of 8.
5. LCM of 7 and 8 is \_\_\_\_\_ .
6. HCF of two consecutive numbers is \_\_\_\_\_ .
7. Complete the factor tree



## Worksheet - 4

### Class VI

### Chapter - 4 (Basic Geometrical Concepts)

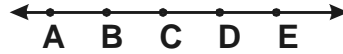
1. Fill in the blank

i) Distance around a circle is its \_\_\_\_\_.

ii) In given line

$$\overline{AC} = \overline{AB} + \underline{\hspace{1cm}}$$

$$\overline{BC} = \overline{BD} - \underline{\hspace{1cm}}$$



iii) An angle is formed by two \_\_\_\_\_ with same initial points called vertex.

2. Match the following



a) Ray

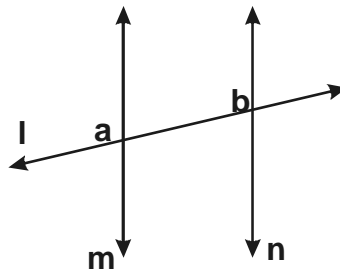


b) Line Segment



c) Line

3. Name the intersecting pairs of line and points of intersection.



4. In the following figure, answer the questions :-

i) Name the diameter of circle \_\_\_\_\_.

ii) Name any radius of circle \_\_\_\_\_.

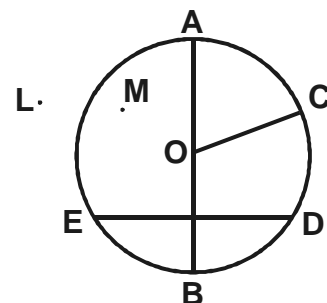
iii) Name centre of the circle \_\_\_\_\_.

iv) Name chord of circle other than diameter \_\_\_\_\_.

v) One interior point in the circle \_\_\_\_\_.

vi) A point on the circle \_\_\_\_\_.

vii) Any exterior point of circle \_\_\_\_\_.



## Worksheet - 5

### Class VI

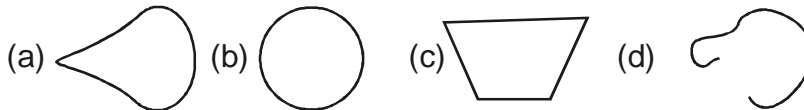
### Chapter - 4 (Basic Geometrical Concepts)

1. Fill in the blank

- i) A triangle is a sided polygon.
- ii) a quadrilateral is a \_\_\_\_\_ sided polygon.
- iii) from two points, a \_\_\_\_\_ can be drawn.

2. MCQ

i) Identify the open curve from the following :-



ii) Identify the polygon from the figure :-

iii) A pair of lines which don't intersect at any point :-

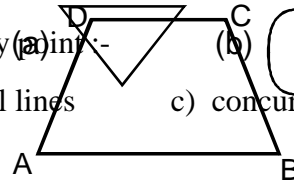
a) Perpendicular lines

b) parallel lines

c) concurrent lines

d) none

iv) A \_\_\_\_\_ is a mark of position.

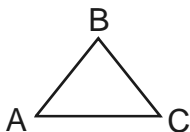


3. Here is a rough sketch of a quadrilateral ABCD.

State

- i) Two pairs of opposite sides \_\_\_\_\_.
- ii) Two pairs of adjacent angles \_\_\_\_\_.
- iii) Two diagonals \_\_\_\_\_.

2. Name the angles in the triangle



a)  $\angle ABC$

b) \_\_\_\_\_,

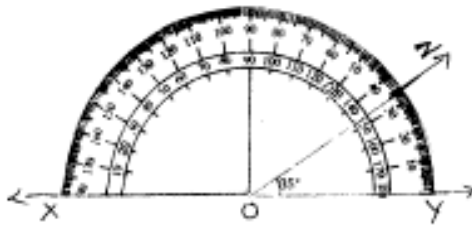
c) \_\_\_\_\_.

## Worksheet - 6

### Class VI

### Chapter - 5 (Understanding Elementary Shapes)

1. What is angle name of half a revolution?



$\angle YOZ =$  \_\_\_\_\_

It is acute or obtuse



$\angle BOC =$  \_\_\_\_\_

It is acute or obtuse

2. Match the following :-

Measure of sides / angles of triangle

- i) 3 sides equal
- ii) 2 sides equal
- iii) All sides different
- iv) all angles acute
- v) 1 right angle
- vi) 1 Obtuse angle
- vii) 1 right angle and two sides equal

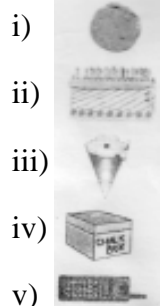
Type of triangle

- scalene
- Isosceles right angled
- Obtuse angled
- Right angled
- Equilateral
- Acute angled
- Isoceles

3. Draw these figure.

- a) A regular pentagon
- b) A parallelo gram

4. Match the figures with the name



- a) Cylinder
- b) Cone
- c) Shere
- d) Cubiod
- e) cube

**Worksheet - 7**  
**Class VI**  
**Chapter - 6 (Integers)**

1. Fill in the blanks :-
  - i) The set of whole numbers and negative numbers is called \_\_\_\_\_.
  - ii) Put the correct sign ( $>$ ,  $<$ ,  $=$ )
    - i)  $(-14) + (-6)$  \_\_\_\_\_  $(-14) - (-6)$
    - ii)  $45 - (-11)$  \_\_\_\_\_  $57 + (-3)$
  - iii)  $16 + (-16) =$  \_\_\_\_\_.
  - iv)  $-5 +$  \_\_\_\_\_  $= 0$
2. Match the following :-

i) $4 + 3$	a) -1
ii) $-4 + 3$	b) 7
iii) $-4 - 3$	c) 1
iv) $4 - 3$	d) -7
3. MCQ
  - i) On subtracting -8 from 0, we get

a) 0	b) 8	c) -8	d) 5
------	------	-------	------
  - ii) Additive inverse of -5 is

a) 5	b) -4	c) 0	d) None
------	-------	------	---------
  - iii)  $(-42) + (-35)$  is equal to

a) -7	b) -77	c) 77	d) 7
-------	--------	-------	------
4. Solve :-
  - i) Write all the integers in ascending order between 0 & -6.
  - ii) Represent in integer form
    - i) A submarine is 500m below the sea level.
    - ii) Deposit of ₹1000 in your account
  - iii) Solve on the number line
    - i)  $(-5) + 2$
    - ii)  $(-5) - (-10)$



**Worksheet - 8**  
**Class VI**  
**Chapter - 7 (Fractions)**

1. Fill in the blanks by using  $>$ ,  $<$  or  $=$  in the following to make correct statements.

a)  $\frac{5}{8} \square \frac{7}{8}$

b)  $\frac{5}{21} \square \frac{7}{7}$

c)  $\frac{2}{3} \square \frac{10}{15}$

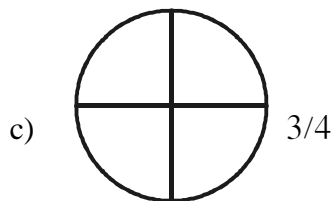
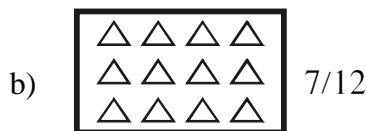
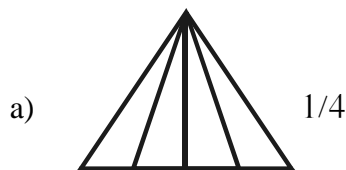
2. Match the following :-

i)  $\frac{12}{15}$  Mixed Fraction

ii)  $\frac{25}{11}$  Proper Fraction

iii)  $3\frac{2}{9}$  Improper fraction

3. Shape the figures for the fraction given below it.



5. Write next three fractions equivalent to  $\frac{1}{5}$

6. Simplify :  $\frac{2}{7} + \frac{3}{14}$

7. Draw  $\frac{2}{7}$  at number line.

8. Write in  $\frac{2}{3}$ ,  $\frac{2}{5}$ ,  $\frac{2}{4}$ ,  $\frac{2}{9}$  asending order.

9. Write  $\frac{15}{75}$  in simplest form.

**Worksheet - 9**  
**Class VI**  
**Chapter - 8 (Decimals)**

1. Fill in the blanks.
- Write 2.08 in the place value table \_\_\_\_\_
  - Write 2.5 as fraction in lowest term \_\_\_\_\_
  - Show 1.2 on number line.
  - $3755 \text{ gm} = \text{_____ kg.}$
  - $152 \text{ mm} = \text{_____ cm.}$
  - 13.9 lies between \_\_\_\_\_ & \_\_\_\_\_ and nearest to \_\_\_\_\_ on number line.
2. Match the following :-
- |                                    |           |
|------------------------------------|-----------|
| i) Three ten and eight tenth       | a) 320.09 |
| ii) Thirty six and seven hundredth | b) 30.8   |
| iii) $300+20 + \frac{9}{100}$      | c) 36.07  |
3. MCQ
- 2 - 0.7 is equal to  
a) 0.5                      b) 1.3                      c) 1.9                      d) 1.5
  - Which is greater 2.1 or 2.155  
a) 2.155                      b) both are equal                      c) 2.1                      d) can't compare
  - $3.5 + 4.05 - 6.005$  is equal to  
a) 1.095                      b) 1.600                      c) 1.950                      d) 1.545
4. Solve
- What is to be added to ₹ 82.5 to get ₹90.
  - Find the sum of  $280.68+28.5+38$
  - Which is lesser and why? 2.08 or 2.083
  - Sita brought fruits weigh 20kg. Out of this 5 kg 500 gm are apples and 4 kg are oranges and rest are bananas. What is weight of bananas?

# Worksheet - 10

## Class VI

### Chapter - 9 (DATA HANDLING)

1. Fill in the blanks.
  - i) Representation of data in form of pictures is called \_\_\_\_\_.
  - ii) In a bar graph width of rectangle is always \_\_\_\_\_.
  - iii) The tally mark  $\text{||||}$  represents \_\_\_\_\_.

2. Complete the following Table.

Tally Marking	Frequency
$\text{    }$	6
$\text{    }$	--
$\text{   }$	--
$\text{    }$	--

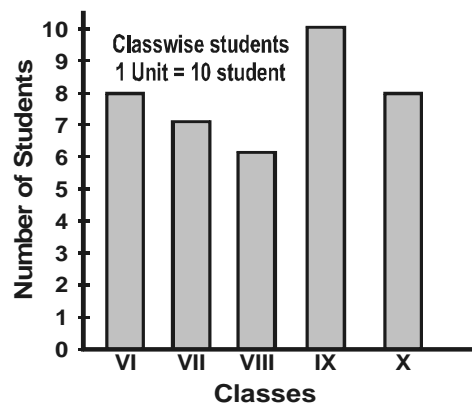
3. Students on roll of a school during 4 years is given in the folloing pictograph.

Year	Number of students
2006	* * *
2007	* * * *
2008	* * * $\text{}$
2009	* * * * $\text{}$

\* represent = 100 Students

Answer the following questions.

- a) How many students were on roll in year 2007 ?
  - b) How many students were more in 2009 than 2008?
4. Bar graph shows the number of students in different classes of a school. Read the graph and answer the following questions.
    - a) How many students are in class X?
    - b) How many students are in class VII?
    - c) How many students are in class IX?



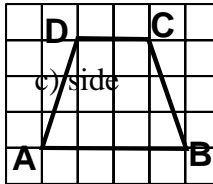
**Worksheet - 11**  
**Class VI**  
**Chapter - 10 (Mensuration)**

1. Fill in the blanks.

- i) Distance covered along the boundary of a close figure \_\_\_\_\_.
- ii) Perimeter of a rectangle is =
- iii) Area of a square =
- iv) Perimeter of an equilateral triangle =
- v) 1 cm = \_\_\_\_\_ mm
- vi) 1 kilometer = \_\_\_\_\_ metre

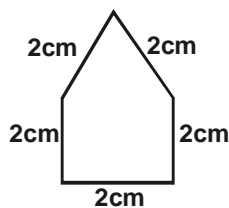
2. MCQ

- i) The amount of surface enclosed by a close figure is
  - a) Volume
  - b) area
  - c) side
  - d) perimeter
- ii) One square meter = \_\_\_\_\_ square cm.
  - a) 100
  - b) 1000
  - c) 10000
  - d) 10
- iii) \_\_\_\_\_ is measured in square units.
  - a) Perimeter
  - b) area
  - c) side
  - d) Volume



3. Solve :-

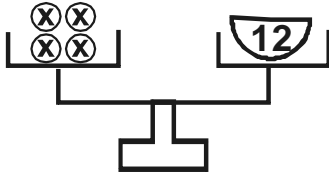
- i) Find the perimeter of the figure.



- ii) Find the area in square meter of a piece of cloth, 5m long and 2m wide.
- iii) By counting the squares, estimate the area of the figure
- iv) A rectangular hall is of length 14m & breadth 12m. How many square tiles of side 10cm are needed to cover the floor of the hall.

**Worksheet - 12**  
**Class VI**  
**Chapter - 11 (Algebra)**

1. i) Write equation for the given picture



- ii) \_\_\_\_\_ No. of matchsticks are use in a pattern of letter F
- iii) 5 is added to P, the expression is \_\_\_\_\_ .
2. Match following with their expressions.
- |                                    |        |
|------------------------------------|--------|
| i) x is added to 8                 | $4x-2$ |
| ii) x is multiplied by 9           | $x+8$  |
| iii) 4 times x and 2 is subtracted | $9x$   |
3. What will be perimeter of square have side 9 cm.
4. If Maya's present age is x years then what will be her age two years ago.
5. There are some expression given below. Which of these are equations.
- |                |               |               |                   |
|----------------|---------------|---------------|-------------------|
| i) $x - 5 > 9$ | ii) $8+5 = 9$ | iii) $9x < 5$ | iv) $2x + 1 = 15$ |
|----------------|---------------|---------------|-------------------|
6. Give expressions for the following :
- i) k is multiplied by 10. \_\_\_\_\_
- ii) x is multiplied by 2 and 9 is subtracted \_\_\_\_\_
- iii) z is divided by 9 \_\_\_\_\_
7. Pick out the solution of equation from values given in the bracket next to equation.
- $P + 5 = 9$  (3, 0, 4, -4)

**Worksheet - 13**  
**Class VI**  
**Chapter - 12 (Ratio and Proportion)**

1. Fill in the blanks :

i) Ratio of 20 minutes to 2 hrs.

ii)  $\frac{24}{18} = \frac{\square}{3} = \frac{8}{\square}$

iii) Are 13, 39, 7, 21 is proportion ? \_\_\_\_\_

2. Match the following :-

If a, b, c, d are first, second, third and forth term of proportion, then

- |                                |                                   |
|--------------------------------|-----------------------------------|
| i) first and fourth terms are  | a) Product of middle values (b×c) |
| ii) Second and third terms are | b) extreme values                 |
| iii) product of extremes (a×d) | c) middle values.                 |

3. MCQ

i) The ratio of 60cm to 1.5 meter is

- |                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| a) $\frac{3}{5}$ | b) $\frac{2}{5}$ | c) $\frac{4}{5}$ | d) $\frac{1}{5}$ |
|------------------|------------------|------------------|------------------|

ii) If cost of one book is ₹15, cost of 9 books will be

- |         |         |         |         |
|---------|---------|---------|---------|
| a) ₹108 | b) ₹120 | c) ₹135 | d) ₹150 |
|---------|---------|---------|---------|

iii) If  $x : 32 :: 4 : 16$ , then value of x is

- |       |      |      |       |
|-------|------|------|-------|
| a) 16 | b) 8 | c) 4 | d) 15 |
|-------|------|------|-------|

4. Solve

i) Divide 50 pens in the ratio 2 : 3 \_\_\_\_\_

ii) The length and breadth of a rectangular field are in the ratio 4 : 5. If length is 20m, find breadth of the field.

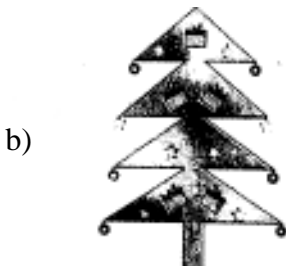
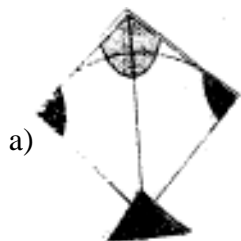
iii) If the cost of 12m of cloth is ₹300, find the cost of 8m cloth.

# Worksheet - 14

## Class VI

### Chapter - 13 (Symmetry)

1. Draw line of symmetry for following figures ?



2. Draw mirror image of following words

**C**    **J**

**U**    **T**

3. Match the following :-

Figures

Line of Symmetry

a) Equilateral triangle

four

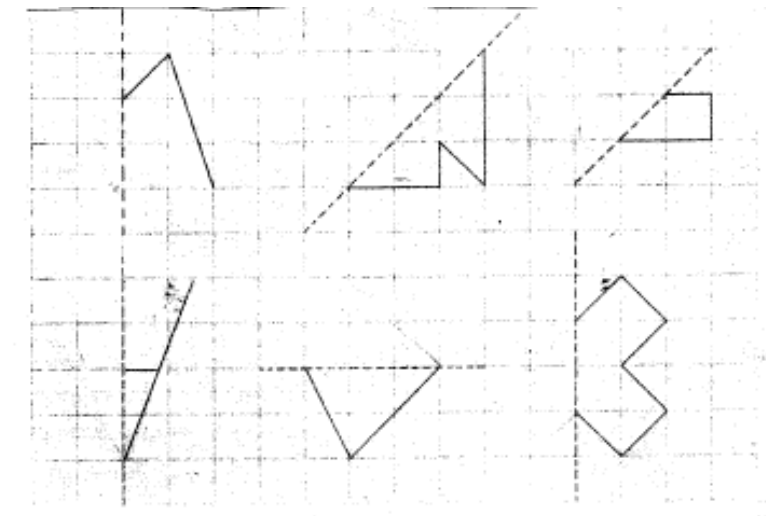
b) Square

Many

c) Circle

Three

4. Draw other half of each figure to make it symmetrical. In each figure the dotted line is the line of symmetry.



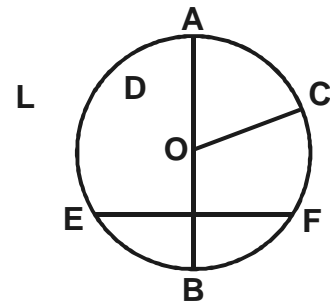
**Worksheet - 15**  
**Class VI**  
**Chapter - 14 (Practical Geometry)**

1. Fill in the blanks :-

- i) If diameter of a circle is 18cm, the radius is \_\_\_\_\_.
- ii) The longest chord of a circle is \_\_\_\_\_.
- iii) Number of circles passing through a given point are \_\_\_\_\_.
- iv) Circle which have same centre but different radii are called \_\_\_\_\_ circles.
- v) Angles of set squares are (i)  $45^\circ$  (ii)  $30^\circ$

2. Refer to the figure given below, answer the following.

- i) Name any radius of the circle \_\_\_\_\_
- ii) Name centre of the circle \_\_\_\_\_
- iii) Name any segment of the circle \_\_\_\_\_
- iv) Name one sector of the circle \_\_\_\_\_
- v) Name any point in the interior of the circle \_\_\_\_\_
- vi) Name any exterior point of circle \_\_\_\_\_
- vii) Name any point on the circle \_\_\_\_\_



3. Solve

- i) Given  $\overline{AB} = 3\text{cm}$  &  $\overline{CD} = 4\text{cm}$ , construct a line segment  $\overline{xy}$  equal to sum of  $\overline{AB}$  &  $\overline{CD}$ .
- ii) Draw a line segment of length 5cm and construct its perpendicular bisector.
- iii) Draw an angle of  $60^\circ$  and construct its bisector.