



CLASS: VI

MATHEMATICS

FRACTIONS

SECTION A

1. The fraction which is less than 1 is \_\_\_\_\_.
2. The fraction which is not equal to  $\frac{4}{5}$  is \_\_\_\_\_.
3.  $\frac{3}{7}$  is a \_\_\_\_\_ fraction.
4. Replace \* by the correct numbers  $\frac{18}{24} = \frac{*}{4}$
5. Fractions must always be written in its \_\_\_\_\_ form.

SECTION B

1. What should be added to  $6\frac{7}{15}$  to get  $8\frac{1}{5}$ ?
2. What is the difference between  $\frac{7}{4}$  and  $\frac{3}{4}$ ?
3. What fraction of months of a year has 31 days?
4. If  $\frac{5}{8} = \frac{20}{p}$ , then the value of  $p$  is?
5. When does a fraction equal to 1? Give one example.

SECTION C

1. Convert  $\frac{2}{3}, \frac{3}{4}, \frac{7}{8}$  into like fractions.
2. Form the fraction of 750 g to a kilogram and reduce it to the lowest term.
3. How many fractions lie between 0 and 1?
4. Write a pair of fractions whose sum is  $\frac{7}{11}$  and difference is  $\frac{2}{11}$ .
5. Simplify:  $7 + 5\frac{1}{8} - 3\frac{1}{4}$

SECTION D

1. When Sunitha weighed herself on Monday she found that she had gained  $1\frac{1}{4}$  kg. Earlier her weight was  $46\frac{3}{8}$  kg. What was her weight on Monday?
2. The teacher taught  $\frac{3}{5}$  of the books, Vivek revised  $\frac{1}{5}$  more on his own. How much does he still have to revise?
3. Three boxes weigh  $18\frac{3}{4}$  kg,  $7\frac{1}{2}$  kg and  $10\frac{1}{5}$  kg respectively. A Porter carries all three boxes. What is the total weight carried by the porter?
4. The cost of a pen is ₹  $6\frac{3}{4}$  and that of a pencil is ₹  $4\frac{1}{6}$ . Which costs more and by how much?
5. Simplify:  $6\frac{1}{6} - 5\frac{1}{6} + 3\frac{1}{3}$

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HALF-YEARLY - WORKSHEET 2

CLASS: VI

MATHEMATICS

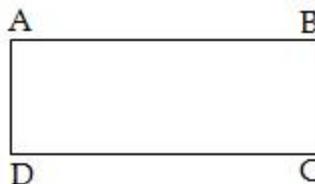
BASIC GEOMETRICAL IDEAS

**SECTION A**

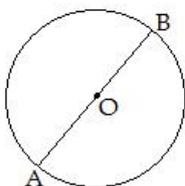
1. The meeting point of adjacent sides of a quadrilateral is called a \_\_\_\_\_.
2. Parallel lines are lines that \_\_\_\_\_.
3. The shortest distance (path) between any two points is called \_\_\_\_\_.
4. Any part of a circle is called an \_\_\_\_\_ of the circle.
5. The area bounded by a diameter and a semicircle is called \_\_\_\_\_.

**SECTION - B**

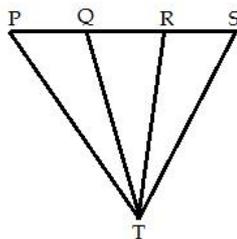
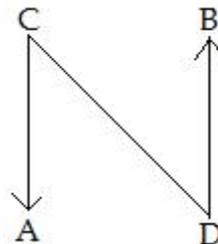
1. Find the radius if the diameter is equal to
  - a. 2.6 cm
  - b. 1.5 cm
2. In the given rectangle name
  - a. Any 2 pairs of opposite sides
  - b. All the four angles



3. In the given circle, name the radius and diameter. What is the relation between them?



4. Name the line segments and rays in the given figure.
5. In the adjoining figure, name

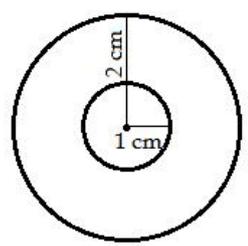


- (i) the triangles which have angles as common
- (ii) all the triangles

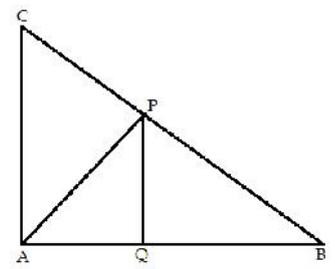
**SECTION - C**

1. Illustrate, if possible each one of the following with a rough diagram.
  - a. A closed curve that is not a polygon.

- b. An open curve made up entirely of line segments
  - c. A polygon with two sides
2. Construct a line segment  $AB = 1.8$  cm. Construct another line segment  $PQ$  whose length is three times as that of  $AB$ . Measure its length.
  3. In the given figure the circles are concentric, find the radius and diameter of the bigger circle.

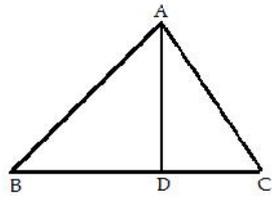
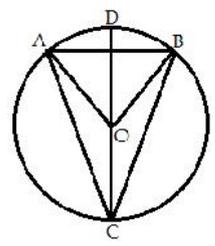


4. (i) Name all the triangles formed in the figure.
  - (ii) Which two points lie on sides  $BC$  and  $AB$  respectively?
  - (iii) Name any two line segments inside the triangle  $ABC$ .
5. If  $AB = 3.4$  cm and  $CD = 3.4$  cm, construct a segment whose length is equal to  $AB + CD$ .

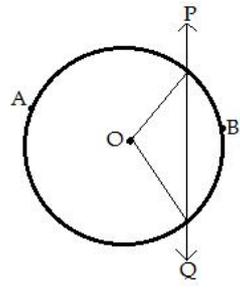


**SECTION - D**

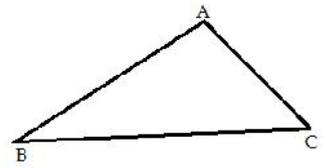
1. From the adjoining figure, name the following
  - a. Radii
  - b. Chords
  - c. Diameter
  - d. Triangles whose vertex is the centre of the circle.
2. In the adjoining figure



- a. Identify the three triangles
  - b. Write the names of six line segments.
  - c. Write the names of seven angles
  - d. Which two triangles have  $\angle B$  as common angles.
3. If  $AB = 2.4$  cm and  $CD = 2.5$  cm, construct a segment whose length is equal to  $3AB - 2CD$ .
  4. In the given circle with centre  $O$  name the following:



- a. Major segment
  - b. Minor segment
  - c. Sector
  - d. Major and Minor arc.
5. Given  $ABC$  is triangle, name the following
    - a. Side opposite to  $BC$
    - b. Angle opposite to vertex  $BC$
    - c. Side opposite to vertex  $A$
    - d. Vertex opposite to side  $AB$



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CLASS: VI

MATHEMATICS

DATA HANDLING

SECTION A

1. The value of  $\overline{\overline{||}} \quad ||$  is \_\_\_\_\_.
2. The weights of 10 girls in kg are given below. The lightest girl in weight is \_\_\_\_\_.  
50, 55, 43, 49, 61, 42, 45
3. The table that represents data in the form of pictures, objects or parts of object is called \_\_\_\_\_.
4. If \*\*\*\* stands for 36, than \*\*\* will stand for \_\_\_\_\_.
5. If  represents 15 toffees, then number of  to be drawn for 90 toffees is \_\_\_\_\_.

SECTION - B

- 1) Given below are the ages of 25 students of class VIII in a school. Prepare a discrete frequency distribution.  
15, 16, 16, 14, 17, 17, 16, 15, 15, 16, 16, 17, 15  
16, 16, 14, 16, 15, 14, 15, 16, 16, 15, 14, 15
- 2) A die was thrown 25 times and the following scores were obtained.  
1    5    2    4    3    6    1    4    2    5    1    6    2    6  
3    5    4    1    3    2    3    6    1    5    2  
Prepare a frequency table of the scores.
- 3) Following relates the weekly wages (in ₹) of 15 workers in a factory. Prepare a frequency table.  
300, 250, 200, 250, 200, 150, 350, 200, 250, 200, 150, 300, 150, 200, 250
  - i) What is the range of wages (in ₹)?
  - ii) How many workers are getting ₹350?
  - iii) How many workers are getting the minimum wages?

4) The colours fridges preferred by people living in a locality are given by the following pictography.



Colour	Number of people
Blue	
Green	
Red	
White	

- Find the number of people preferring blue colour.
  - How many liked red colour?
  - What is the ratio of the number of people preferring white colour to the number of people preferring blue colour?
- 5) Draw a pictograph of following survey of the favourite ice-cream of 23 boys.

Ice Cream	Vanilla	Chocolate	Almond	Pista	Others
Number of Boys	6	5	2	8	2

6) Construction of houses in a certain village in different years is shown as under.

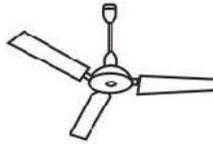
Years	1990	1991	1992	1993	1994
Number of houses	1200	1500	2100	2400	3000

Draw a bar graph to represent the above information.

- In which year maximum number of houses was constructed?
- What is the total number of houses constructed during the year 1990 - 1994?

7) The number of fans sold by a shopkeeper during 6 months are given below:

Draw a pictograph taking the scale



= 10 fans sold.

Month	March	April	May	June	July	August
Number of fans sold	30	40	60	50	20	30

8) Following is the information about the number of cars produced by a company in six months.

Months	January	February	March	April	May
Number of cars produced	2000	1000	2400	800	1400

Draw a bar graph to represent this information. (Take 1 unit = 200 cars)

9) The liking of different fruits by students is given below. Draw a bar graph and answer the following.

No of students	Apple	Guava	Orange	Banana
Fruits	10	5	8	6

- i) Which fruit is liked by most of the students?
- ii) How many students like orange?
- iii) How many more students like banana than guava?
- iv) How many more students like apple than orange?

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CLASS: VI

MATHEMATICS

SYMMETRY

**SECTION A**

1. Rhombus is symmetrical about \_\_\_\_\_.
2. The triangle that has no line of symmetry is \_\_\_\_\_.
3. A kite is symmetrical about the \_\_\_\_\_.
4. The quadrilateral which has only two lines of symmetry is \_\_\_\_\_.
5. The number of lines of symmetry of a circle is \_\_\_\_\_.

**SECTION B**

1. Name any two letters that has two lines of symmetry.
2. Which letter together with its mirror image will form the letter O?
3. Name any two Indian historical monuments that have a line of symmetry.
4. Using the digits 0 to 9, without repeating the digits, write the three digit numbers that have a horizontal line of symmetry.
5. Form a word using the letters having only horizontal line of symmetry.

**SECTION C**

1. Draw shapes with following conditions and name them
  - a. Exactly 1 line of symmetry
  - b. Exactly 3 lines of symmetry.
  - c. Four lines of symmetry
  - d. Six lines of symmetry.
2. Name any two letters in English Alphabets having both horizontal and vertical lines of symmetry.
3. How many lines of symmetry does a regular polygon have?
4. Draw the lines of symmetry for the following figures, if possible.

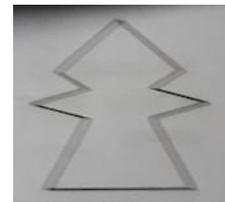
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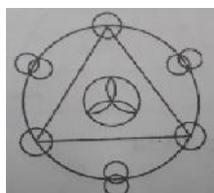
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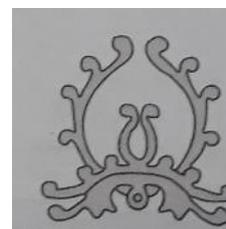
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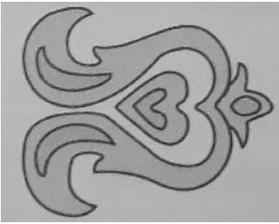
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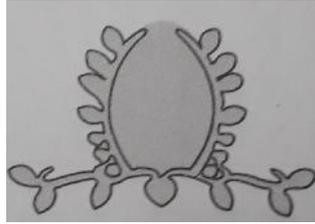
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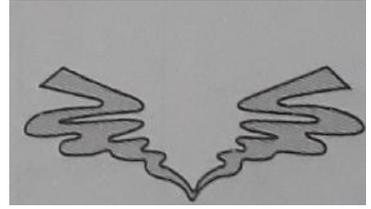
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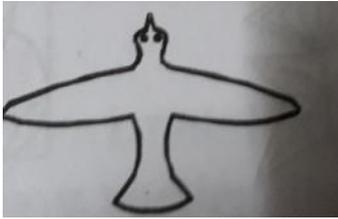
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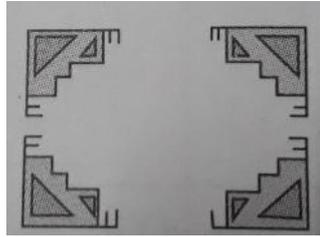
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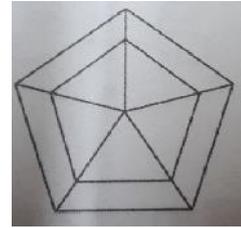
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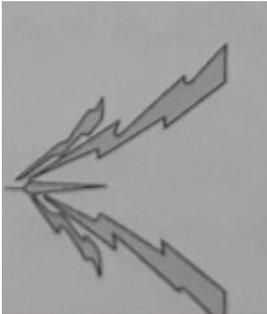
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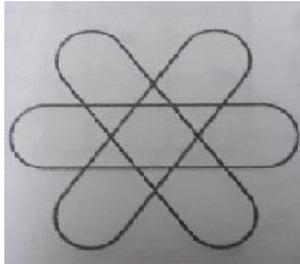
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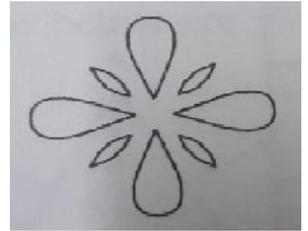
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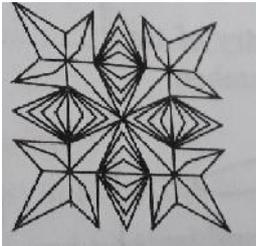
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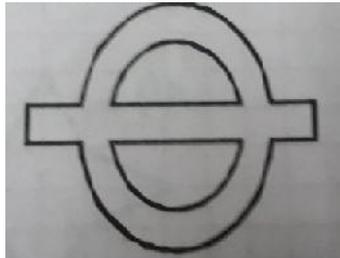
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(xvi)



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