



WORK SHEET- 1

FIRST TERM EXAM, 2019 - 20

GRADE: VIII

SUBJECT: MATHEMATICS

1 MARK QUESTIONS:

1. If $2x - 3 = x + 2$, then $x = ?$
(a) 1 (b) 3 (c) 5 (d) 7
2. How many diagonals are there in a hexagon?
(a) 6 (b) 8 (c) 9 (d) 10
3. Two diagonals are not necessarily equal in a
(a) Rectangle (b) square (c) rhombus (d) isosceles trapezium
4. Each interior angle of a regular decagon is
(a) 60° (b) 120° (c) 144° (d) 144°
5. The measure of each exterior angle of a regular polygon is 40° . How many sides does it have?
(a) 8 (b) 9 (c) 6 (d) 10

2 MARK QUESTIONS:

1. Three angles of a quadrilateral are 54° , 80° and 116° . Find the measure of the fourth angle.
2. Two adjacent angles of a parallelogram are $(3x - 4)^\circ$ and $(3x + 16)^\circ$. Find the measure of each of its angles.
3. Ravi is making a kite with the measurements given by his brother. He forgot half of the measurements. What will be the lengths of the other sides if one of the sides measures 6 cm and the perimeter is 40cm?
4. Find the measure of the missing angles in a parallelogram where one of the angles is given by
(a) 157° (b) 131°
5. Draw a parallelogram and its diagonals. Identify all the alternate interior angles within the parallelogram.

3 MARK QUESTIONS:

1. Monu's father is 26 years younger than Monu's grandfather and 29 years older than Monu. The sum of the ages of all the three is 135 years. What is the age of each one of them?
2. Construct a rhombus ABCD in which AB = 4cm, and diagonal AC is 6.5cm.
3. The sum of two opposite angles of a parallelogram is 130° . Find the measure of each of its angles.
4. The number of members in 20 families are given below:
4, 6, 5, 5, 4, 6, 3, 3, 5, 5, 3, 5, 4, 4, 6, 7, 3, 5, 5, 7. Prepare a frequency distribution of the data.
5. Compare the properties of rhombus and a parallelogram.

4 MARK QUESTIONS:

1. The sum of the digits of a two-digit number is 15. If the number formed by reversing the digits is less than the original number by 27. Find the original number.
2. The denominator of a rational number is greater than its numerator by 3. If 3 is subtracted from the numerator and 2 is added to its denominator, the new number becomes $\frac{1}{5}$. Find the original number
3. The weekly pocket expenses (in rupees) of 30 students of a class are given below:
62, 80, 110, 75, 84, 73, 60, 62, 100, 87, 78, 94, 117, 86, 65, 68, 90, 80, 118, 72, 95, 72, 103, 96, 64, 94, 87, 85, 105, 115.
Construct a frequency table with class intervals 60 – 70, 70 – 80 etc and hence draw a histogram.
4. Draw a double bar graph for the data in the table:

Favourite Colour	No. of children in first Colony	No. of children in second Colony
Black	20	15
White	15	10
Red	25	30
Blue	15	20
Green	15	12
Any other	5	8

5. Construct a quadrilateral DEFG with the given measurements:
DE = 7 cm, EF = 3.5 cm, GF = 3 cm, DG = 5 cm, DF = 8 cm.
