

**Sant Nirankari Public School, Malviya Nagar**

**Class: VI Sub: Mathematics**

**Home Assignment -2**

1. Fill in the blanks :

- (i) Is 28 a perfect number?
- (ii) Express  $\frac{96}{120}$  in simplest form.
- (iii) Represent 2.5 on the number line.
- (iv) Write the expressions for "2 times y added to 3".
- (v) An equation having a variable with power equal to 1 is called a \_\_\_\_\_.
- (vi) In an equilateral triangle, the three angles are equal and each angle equals \_\_\_\_\_.
- (vii) If diameter 3.5 cm, then find the radius.
- (viii) A table - top measures 3m by 2m 60cm. What is its area in square centimeters?
- (ix) The area cut off by the chord is called the \_\_\_\_\_.
- (x) In triangle ABC, angle A =  $33^{\circ}$  and angle B =  $49^{\circ}$ . Find the third angle.

2. Do as directed :

- (i) Test the divisibility of the number 14245 by 11.
- (ii) Find the HCF of 175625 by long division method.
- (iii) Find the LCM of 120, 250 by the common division method.
- (iv) The HCF and LCM of the two numbers are 5 and 400 respectively. If one of the number is 25, find the other number.

3. Solve the following :

- (i) Arrange in ascending order :

$$\frac{5}{9}, \frac{6}{12}, \frac{3}{12}, \frac{1}{3}, \frac{5}{6}$$

- (ii)  $7\frac{3}{2} + \frac{4}{9} + \frac{8}{3}$

- (iii) Find the equivalent fraction of  $\frac{6}{7}$  with :

(a) Denominator = 21    (b) numerator = 24

- (iv)  $4\frac{5}{12} - 1\frac{3}{8}$

4. Estimate the following :

- (i)  $21.406 + 27.698$
- (ii)  $118.5926 - 56.4379$
- (iii)  $148.562 + 14.479 - 152.47$
- (iv) Convert : 87g and 28 mg to Kg

5. Evaluate the following :

- (i)  $8x^2 + 5xy - y^3$  for  $x = 3$  and  $y = 2$
- (ii)  $-3abc - 3$  for  $a = 1, b = 2$  and  $c = 3$

6. Find the solution of the following :

- (i)  $x - 6 = 15$  by trial and error method.
- (ii)  $2x + 12 = 20$  by systematic method.
- (iii)  $\frac{3x}{6} - 8 = 15$  by transposition method.

7. In a parallelogram ABCD :

- (i) Angle  $56^\circ$ , find the measure of the other angles.
- (ii) The sum of the two opposite angles of a parallelogram is  $140^\circ$ . Find all the angles of the parallelogram.

8. Draw a circle O with radius OA = 3.5 cm :

- (i) Name any two points each on the interior and exterior of the circle.
- (ii) Draw points X and Y on the boundary of the circle.

9. Solve the following word problems :

- (i) Monika went to a park which is 600m long and 300m wide. She took 3 complete rounds around its boundary. What distance did she cover?
- (ii) Seema's age is 3 years more than 3 times the age of her daughter. If Seema is 30 years old, find the age of her daughter.
- (iii) What number should be subtracted from 21.578 to get 14.352?
- (iv) Varun had to travel 12km from Town A to Town B. He travelled  $\frac{5}{8}$  km by bus. He had travelled another  $\frac{1}{4}$  km by car just before the car broke down. How far was he from Town B.?
- (v) If a number is increased by 10, then it is divisible by 16, 54 and 40. Find the number.

10. From the adjoining figure, identify :

- (i) Minor arc
- (ii) Major arc
- (iii) Minor segment
- (iv) Major segment

