

# HOLIDAY HOME WORK

## CLASS VII

### MATHEMATICS

1. Represent the following on number line:

a)  $-\frac{5}{8}$  b)  $\frac{7}{8}$

2. List five rational numbers between  $-\frac{4}{5}$  and  $-\frac{2}{3}$ , -2 and -1

3. Find: i)  $\frac{5}{3} + \frac{3}{5}$  ii)  $-\frac{9}{10} - \frac{22}{15}$

4. Find i)  $\frac{3}{10} \times (-9)$  ii)  $-\frac{6}{5} \times \frac{9}{11}$

5. Find the value of i)  $-\frac{3}{5} \div 2$  ii)  $-\frac{1}{8} \div \frac{3}{4}$

6. Draw a line  $l$ . Draw a perpendicular to  $l$  at any point on  $l$ . On this perpendicular choose a point X, 4 cm away from  $l$ . Through X, draw a line  $m$  parallel to  $l$ .

7. Construct a triangle ABC, given that  $AB = 5$  cm,  $BC = 6$  cm and  $AC = 7$  cm.

8. Construct an isosceles triangle in which the lengths of each of its equal sides is 6.5 cm and the angle between them is  $110^\circ$ .

9. Construct a right-angled triangle whose hypotenuse is 6 cm long and one of the legs is 4 cm long.

#### 10. MATCH THE COLUMN

A	B
Perimeter of a square is	$3 \times \text{side}$
Perimeter of rectangle is	$\text{Side} \times \text{side}$
Area of a square is	$\frac{1}{2} \text{ base} \times \text{height}$
Area of a triangle	$2(1 + b)$
Standard unit of area	$4 \times \text{side}$
Perimeter of an equilateral triangle is	$\text{Sq. cm}$
Circumference of a circle is	$\pi r^2$
Area of a circle is	$2\pi r$

11. Find the perimeter and area of rectangle with length 4 cm and breadth 3cm

12. Find the area and circumference of a circle with radius 8 cm.

13. find the area of a parallelogram of base 16 cm and height 0.6m.

14. If the circumference of a circular sheet is 154 m, find its radius. Also find the area of the sheet.

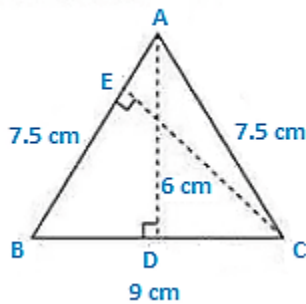
15. *Find*

*(a) the area of the land*

(b) the price of the land,

If the land is of rectangular shape measuring 300 m in length and 400 m in breadth. The cost of 1m<sup>2</sup> land is Rs. 10000.

16. Triangle ABC is isosceles with  $AB = AC = 7.5$  cm and  $BC = 9$  cm (in the given figure). The height AD from A to BC is 6 cm. Find the area of triangle ABC. What will be the height from C to AB i.e., CE?



17. find the value of  $2^6$ ,  $5^4$

18. Simplify  $(4^5 \times a^8 b^3) / (4^5 \times a^5 b^2)$

19. Simplify i)  $(-3) \times (-2)^3$  ii)  $2^0 \times 4^0 \times 3^0$

20. Express the following exponential form i) 7000000 ii) 3908.78