

# HOLIDAY HOME WORK

## CLASS VII

### MATHEMATICS

1. Represent the following on number line:  
a)  $-5/8$  b)  $7/8$
2. List five rational numbers between  $-4/5$  and  $-2/3$ ,  $-2$  and  $-1$
3. Find: i)  $5/3 + 3/5$  ii)  $-9/10 - 22/15$
4. Find i)  $3/10 \times (-9)$  ii)  $-6/5 \times 9/11$
5. Find the value of i)  $-3/5 \div 2$  ii)  $-1/8 \div 3/4$
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

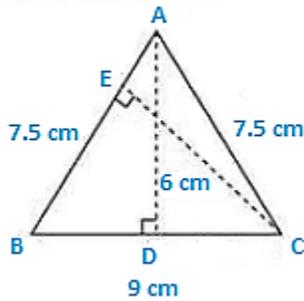
A	B
Perimeter of a square is	$3 \times \text{side}$
Perimeter of rectangle is	$\text{Side} \times \text{side}$
Area of a square is	$\frac{1}{2} \text{ base} \times \text{height}$
Area of a triangle	$2(1 + b)$
Standard unit of area	$4 \times \text{side}$
Perimeter of an equilateral triangle is	$\text{Sq.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