

# INTERNATIONAL INDIAN SCHOOL BURAIDAH

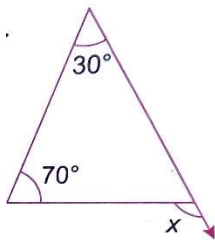
Worksheet for the Academic Year 2023-24

**CLASS: VII    SUBJECT: MATHEMATICS    DATE:15-11-2023**

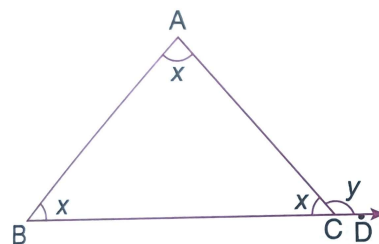
## LESSON:6 – TRIANGLE AND ITS PROPERTIES

1. The side opposite to the vertex A of  $\Delta ABC$  is -----
2. The measure of each angle of an equilateral triangle is -----
3. A triangle has ----- medians and ----- altitudes
4. In a -----angled triangle one of its sides form the altitude
5. The sum of any two sides of a triangle is always -----its third side
6. Three angles of a triangle are in the ratio 3: 3: 4. Find the measures of each angle
7. The two interior opposite angles of an exterior angle of a triangle are  $75^\circ$  and  $35^\circ$ . Find the measure of the exterior angle
8. The lengths of the two sides of a triangle are 4cm and 9cm. Between what two measures should the length of the third side fall?
9. Check whether 6.5cm, 5.6cm, 12 cm can be the sides of a triangle
10. Which of the following lengths can be the sides of a right-angled triangle?  
a) 4cm, 7.5cm, 8.5cm                      b) 9cm, 12cm, 15cm                      c) 2cm, 7cm, 10cm
11. The two sides of a rectangle are 12 cm and 5 cm. Find the length of its diagonal
12. A cable wire of length 61m is attached to the top of a building from the bottom of a pole fixed at a distance of 11m from the bottom of the building. Find the height of the building
13. Find the unknown values in each of the following figures:

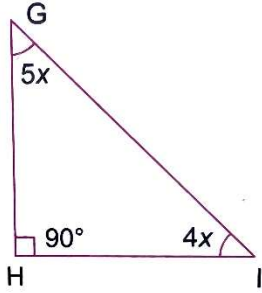
a)



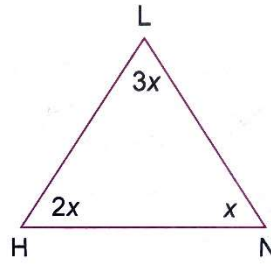
b)



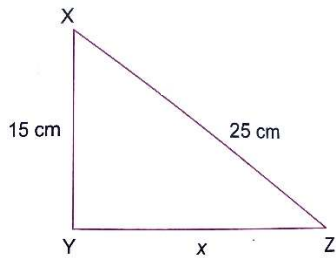
c)



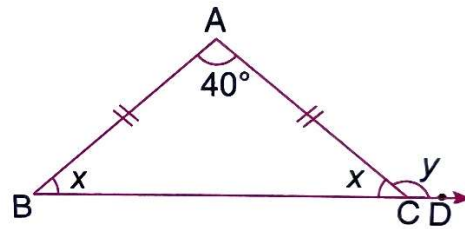
d)



e)



f)



**Answers:**

- |                    |                                   |                                  |                 |            |
|--------------------|-----------------------------------|----------------------------------|-----------------|------------|
| 1) BC              | 2) $60^\circ$                     | 3) 3,3                           | 4) right angled | 5) greater |
| 6) $110^\circ$     | 7) $54^\circ, 54^\circ, 72^\circ$ | 8) 5 & 13                        | 9) Yes          |            |
| 10) a) Yes         | b) Yes                            | c) No                            | 11) 13cm        | 12) 60m    |
| 13) a) $110^\circ$ | b) $x = 60^\circ, y = 120^\circ$  | c) $x = 10^\circ$                |                 |            |
| d) $x = 30^\circ$  | e) $x = 20\text{cm}$              | f) $x = 70^\circ, y = 110^\circ$ |                 |            |

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