# Properties of Triangles

1. In a $\triangle ABC$, $\angle A = 60^0$, $\angle B = 40^0$ find $\angle C$.

2. In a $\triangle ABC$, $\angle B = 75^0$, $\angle C = 40^0$ find $\angle C$.

3. Two angle of a right angled triangle add up to $130^0$, find the third angle.

4. **One of the two equal angles of an isosceles triangle measures $55^0$. Find the measures of all the three angles of the triangle.**

5. **If the unequal angle of an isosceles triangle is $70^0$, find all the angles of the triangle.**

6. **Find the measures of all the angles of an equilateral triangle.**

7. **Is it possible to have a triangle whose angles are?**

   **a.** $40^0$ , $65^0$ , $75^0$

   **b.** $40^0$ , $110^0$ , $30^0$

   **c.** $75^0$ , $100^0$ , $80^0$

   **d.** $50^0$ , $50^0$ , $98^0$

8. **Is it possible to form a triangle by three line segments of the following lengths?**

   **a.** 8cm, 8cm, 8cm

   **b.** 6cm, 8cm, 12cm

   **c.** 4cm, 6cm, 11cm

   **d.** 7cm, 7cm, 15cm