

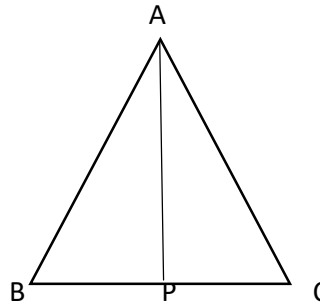
TRIANGLE AND ITS PROPERTIES

Q1. One of the exterior angle of a ΔABC measures 150° . If one of the interior opposite angle is 75° . Find the other interior opposite angle. What type of triangle is this?

Q2. ΔABC is an isosceles triangle with $AB = BC$. If $B = 40^\circ$, what are the measures of A and C.

Q3. $AB = AC$ and AP is perpendicular to BC and $B = 60^\circ$, then find

- i) Angle BAP.
- ii) Angle ACB.



Q4. Which of the following can be the sides of a triangle?

- a) 6,4,8
- b) 8,10,18
- c) 3,4,10
- d) 35,38,40

Q5. The length of the two sides of a triangle are 4cm and 6cm. Between what two measures should the length of the third side fall?

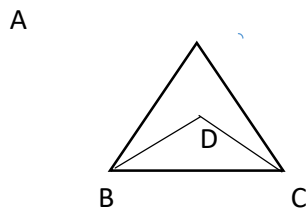
Q6. The length of the two sides of a right triangle are 5cm and 12cm. Find the length of the hypotenuse.

Q7. A ladder is placed in such a way that its foot is at a distance of 7m from a wall and its top reaches a window 25m above the ground. Determine the length of ladder.

Q8. Draw a rough diagram for each :

- a) Medians and centroid of a triangle.
- b) Altitudes and Orthocentre of a triangle
- c) Circumcentre of a triangle.

Q9. Given : $\angle BAC = 30^\circ$, $\angle BDC = 70^\circ$, Find $\angle ABD$.



Q10. Given : $\angle ACB = \angle CAB = \angle EDB = 30^\circ$, Find $\angle DEA$ and $\angle EBD$.

