

Class 10 Maths

Chapter – 6 Triangles

Extra Questions – 1

(1) A man goes 15m west and then 8m north. Find distance from the starting point.

- (a) 17 m
- (b) 18 m
- (c) 16 m
- (d) 7 m

Ans –(a) 17 m

(2) The side of square whose diagonal is 16 cm is –

- (a) 16 cm
- (b) $8\sqrt{2}$ cm
- (c) $5\sqrt{2}$ cm
- (d) None of these

Ans – (b) $8\sqrt{2}$ cm

(3) If in two triangles ABC and PQR, $\frac{AB}{QR} = \frac{BC}{PR} = \frac{CA}{PQ}$

- (a) $\Delta PQR \sim \Delta CAB$
- (b) $\Delta PQR \sim \Delta ABC$
- (c) $\Delta CBA \sim \Delta PQR$
- (d) $\Delta BCA \sim \Delta PQR$

Ans – (a) $\Delta PQR \sim \Delta CAB$

(4) D, E and F are the mid-points of the sides AB, BC and CA respectively of ΔABC , then $\frac{ar(\Delta DEF)}{ar(\Delta ABC)}$ is

- (a) 1:4
- (b) 4:1

- (c) 1:2
- (d) None of these

Ans (a) 1:4

(5) In a triangle, $DE \parallel BC$ and $AD = 1$ m. the ratio of the area of $\triangle ABC$ to the area of $\triangle ADE$ is –

- (a) 9:1
- (b) 1:9
- (c) 3:1
- (d) None of these

Ans – 9:1

(6) Length of an altitude of an equilateral triangle of side '2a' cm is –

- (a) 3a cm
- (b) $\sqrt{3}$ a cm
- (c) $\sqrt{\frac{3}{2}}$ a cm
- (d) $2\sqrt{3}$ a cm

Ans – (b) $\sqrt{3}$ a cm

(7) In an isosceles triangle ABC, if $AC=BC$ and $AB^2 = 2AC^2$, then $\angle C =$

- (a) 45°
- (b) 60°
- (c) 90°
- (d) 30°

Ans – (c) 90°

(8) If $\triangle ABC \sim \triangle RPQ$, $AB = 3$ cm, $BC = 5$ cm, $AC = 6$ cm, $RP = 6$ cm and $PQ = 10$, then find QR.

- (a) 10 cm
- (b) 12 cm
- (c) 14 cm
- (d) 8 cm

Ans – (b) 12 cm

(9) Sides of two similar triangles are in the ratio 4:9. Areas of these triangles are in the ratio :

(a) 2:3

(b) 4:9

(c) 81:16

(d) 16:81

Ans – (d) 16:81

(10) Which figures are similar –

(a) Two rectangles

(b) Two Triangles

(c) Two circles

(d) Two trapezium

Ans – (c) Two circles