

## ONE MARK TEST

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ENGLISH MEDIUM

LESSON – 4

TEST - 1

1 If in  $\triangle ABC$ ,  $DE \parallel BC$ .  $AB = 3.6$  cm,  $AC = 2.4$  cm and  $AD = 2.1$  cm then the length of AE is

(A) 1.4 cm (B) 1.8 cm (C) 1.2 cm (D) 1.05 cm

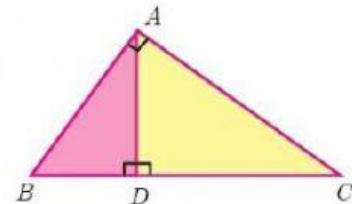
2 If  $\triangle ABC$  is an isosceles triangle with  $\angle C = 90^\circ$  and  $AC = 5$  cm, then  $AB$  is

(A) 2.5 cm (B) 5 cm (C) 10 cm (D)  $5\sqrt{2}$  cm

3

In the adjacent figure  $\angle BAC = 90^\circ$  and  $AD \perp BC$  then

(A)  $BD \cdot CD = BC^2$  (B)  $AB \cdot AC = BC^2$   
(C)  $BD \cdot CD = AD^2$  (D)  $AB \cdot AC = AD^2$



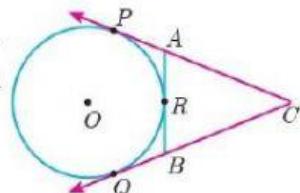
4 How many tangents can be drawn to the circle from an exterior point?

(A) one (B) two (C) infinite (D) zero

5

In figure  $CP$  and  $CQ$  are tangents to a circle with centre at  $O$ .  $ARB$  is another tangent touching the circle at  $R$ . If  $CP = 11$  cm and  $BC = 7$  cm, then the length of  $BR$  is

(A) 6 cm (B) 5 cm  
(C) 8 cm (D) 4 cm



6 Two poles of heights 6 m and 11 m stand vertically on a plane ground. If the distance between their feet is 12 m, what is the distance between their tops?

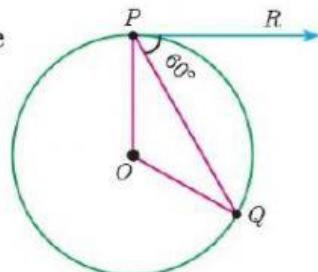
(A) 13 m (B) 14 m (C) 15 m (D) 12.8 m

7 The perimeters of two similar triangles  $\triangle ABC$  and  $\triangle PQR$  are 36 cm and 24 cm respectively. If  $PQ = 10$  cm, then the length of  $AB$  is

(A)  $6\frac{2}{3}$  cm (B)  $\frac{10\sqrt{6}}{3}$  cm (C)  $66\frac{2}{3}$  cm (D) 15 cm

8 In figure if  $PR$  is tangent to the circle at  $P$  and  $O$  is the centre of the circle, then  $\angle POQ$  is

(A)  $120^\circ$  (B)  $100^\circ$   
(C)  $110^\circ$  (D)  $90^\circ$



9 In a  $\triangle ABC$ ,  $AD$  is the bisector of  $\angle BAC$ . If  $AB = 8$  cm,  $BD = 6$  cm and  $DC = 3$  cm. The length of the side  $AC$  is

(A) 6 cm (B) 4 cm (C) 3 cm (D) 8 cm

10 If in triangles  $ABC$  and  $EDF$ ,  $\frac{AB}{DE} = \frac{BC}{FD}$  then they will be similar, when

(A)  $\angle B = \angle E$  (B)  $\angle A = \angle D$  (C)  $\angle B = \angle D$  (D)  $\angle A = \angle F$