ONE MARK TEST

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ENGLISH MEDIUM **LESSON – 4** **TEST - 3**

1 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

2 A tangent is perpendicular to the radius at the

(A) centre (B) point of contact (C) infinity (D) chord

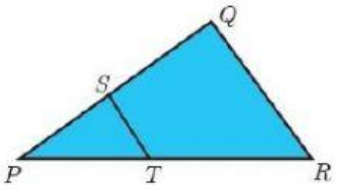
3 If in triangles ABC and EDF, $\frac{AB}{DE} = \frac{BC}{FD}$ then they will be similar, when

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

4 The two tangents from an external points P to a circle with centre at O are PA and PB. If $\angle APB = 70°$ then the value of $\angle AOB$ is

(A) 100° (B) 110° (C) 120° (D) 130°

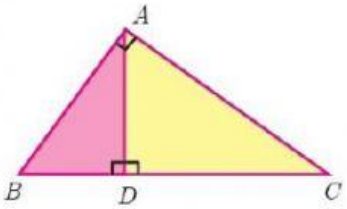
5 In a given figure $ST \parallel QR$, $PS = 2$ cm and $SQ = 3$ cm. Then the ratio of the area of ΔPQR to the area of ΔPST is



(A) 25 : 4 (B) 25 : 7

(C) 25 : 11 (D) 25 : 13

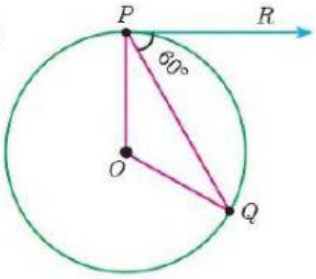
6 In the adjacent figure $\angle BAC = 90°$ and $AD \perp BC$ then



(A) $BD \cdot CD = BC^2$ (B) $AB.AC = BC^2$

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

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



(A) $120°$ (B) $100°$

(C) $110°$ (D) $90°$

8 In a ΔABC, 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

9 If ΔABC is an isosceles triangle with $\angle C = 90°$ and $AC = 5$ cm, then AB is

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

10 If in ΔABC, $DE \| BC$. $AB = 3.6$ 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