

Class 10 Maths Chapter 6 Triangles MCQs For Practice

1. D and E are respectively the points on the sides AB and AC of a triangle ABC such that AD = 2 cm, BD = 3 cm, BC = 7.5 cm and DE || BC. Then, length of DE (in cm) is

- (a) 2.5
- (b) 3
- (c) 5
- (d) 6

2. If $\triangle ABC \sim \triangle EDF$ and $\triangle ABC$ is not similar to $\triangle DEF$, then which of the following is not true?

- (a) $BC \cdot EF = AC \cdot FD$
- (b) $AB \cdot EF = AC \cdot DE$
- (c) $BC \cdot DE = AB \cdot EF$
- (d) $BC \cdot DE = AB \cdot FD$

3. If in two triangles DEF and PQR, $\angle D = \angle Q$ and $\angle R = \angle E$, then which of the following is not true?

- (a) $EF/PR = DF/PQ$
- (b) $DE/PQ = EF/RP$
- (c) $DE/QR = DF/PQ$
- (d) $EF/RP = DE/QR$

4. If $\triangle ABC \sim \triangle QRP$, $\text{ar}(\triangle ABC)/\text{ar}(\triangle PQR) = 9/4$, AB = 18 cm and BC = 15 cm, then PR is equal to

- (a) 10 cm
- (b) 12 cm
- (c) $20/3$ cm
- (d) 8 cm

5. Identify the one which is not the congruence criteria of two triangles.

- (a) RHS
- (b) SAS
- (c) ASA
- (d) AAS

6. If in a triangle, square of one side is equal to the sum of the squares of the other two sides, then the angle opposite the first side is

- (a) an acute angle
- (b) obtuse angle
- (c) a right angle
- (d) a reflex angle

7. If S is a point on side PQ of a $\triangle PQR$ such that PS = QS = RS, then

- (a) $PR \cdot QR = RS^2$
- (b) $QS^2 + RS^2 = QR^2$
- (c) $PR^2 + QR^2 = PQ^2$
- (d) $PS^2 + RS^2 = PR^2$

8. ABC and BDE are two equilateral triangles such that D is the mid-point of BC. Ratio of the areas of triangles ABC and BDE is

- (a) 2 : 1
- (b) 4 : 1
- (c) 1 : 2
- (d) 1 : 4

9. In ΔABC , $AB = 24$ cm, $BC = 10$ cm and $AC = 26$ cm, such that the ΔABC is

- (a) a right triangle
- (b) an acute angled triangle
- (c) obtuse angled triangle
- (d) a right isosceles triangle

10. Hypotenuse of a right triangle is 25 cm and out of the remaining two sides, one is longer than the other by 5 cm. The lengths of the other two sides are

- (a) 15 cm and 10 cm
- (b) 15 cm and 20 cm
- (c) 12 cm and 23 cm
- (d) 10 cm and 15 cm

***** ANSWER KEY *****

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|---------|---------|---------|---------|----------|
| 1 - (b) | 2 - (c) | 3 - (b) | 4 - (a) | 5 - (d) |
| 6 - (c) | 7 - (c) | 8 - (b) | 9 - (a) | 10 - (b) |