

CHAPTER 7

TRIANGLES

1 EXERCISE 9.7.1

In each of the following, write the correct answer:

1. Which of the following is not a criterion for congruence of triangles?
 - (a) SAS
 - (b) ASA
 - (c) SSA
 - (d) SSS
2. If $AB = QR, BC = PR$ and $CA = PQ$, then
 - (a) $\triangle ABC \cong \triangle PQR$
 - (b) $\triangle CBA \cong \triangle PRQ$
 - (c) $\triangle BAC \cong \triangle RPQ$
 - (d) $\triangle PQR \cong \triangle BCA$
3. In $\triangle ABC, AB = AC$ and $\angle B = 50^\circ$. Then $\angle C$ is equal to
 - (a) 40°
 - (b) 50°
 - (c) 80°
 - (d) 130°
4. In $\triangle ABC, BC = AB$ and $\angle B = 80^\circ$. Then $\angle A$ is equal to
 - (a) 80°
 - (b) 40°
 - (c) 50°
 - (d) 100°
5. In $\triangle PQR, \angle R = \angle P$ and $QR = 4cm$ and $PR = 5cm$. Then the length of PQ is
 - (a) $4cm$

- (b) $5cm$
 - (c) $2cm$
 - (d) $2.5cm$
6. D is a Point on the side BC of a $\triangle ABC$ such that AD bisects $\angle BAC$. Then
- (a) $BD = CD$
 - (b) $BA > BD$
 - (c) $BD > BA$
 - (d) $CD > CA$
7. It is given that $\triangle ABC \cong \triangle FDE$ and $AB = 5cm$, $\angle B = 40^\circ$ and $\angle A = 80^\circ$. Then which of the following is true?
- (a) $DF = 5cm$, $\angle F = 60^\circ$
 - (b) $DF = 5cm$, $\angle E = 60^\circ$
 - (c) $DE = 5cm$, $\angle E = 60^\circ$
 - (d) $DE = 5cm$, $\angle D = 40^\circ$
8. Two sides of a triangle are of lengths $5cm$ and $1.5cm$. The length of the third side of the triangle cannot be
- (a) $3.6cm$
 - (b) $4.1cm$
 - (c) $3.8cm$
 - (d) $3.4cm$
9. In $\triangle PQR$, if $\angle R > \angle Q$, then
- (a) $QR > PR$
 - (b) $PQ > PR$
 - (c) $PQ < PR$
 - (d) $QR < PR$
10. In triangles ABC and PQR , $AB = AC$, $\angle C = \angle P$ and $\angle B = \angle Q$. The two triangles are
- (a) isosceles but not congruent
 - (b) isosceles and congruent
 - (c) congruent but not isosceles
 - (d) neither congruent nor isosceles
11. In triangles ABC and DEF , $AB = FD$ and $\angle A = \angle D$. Then two triangles will be congruent by SAS axiom if
- (a) $BC = EF$
 - (b) $AC = DE$
 - (c) $AC = EF$
 - (d) $BC = DE$