

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)  $40^\circ$
  - (b)  $50^\circ$
  - (c)  $80^\circ$
  - (d)  $130^\circ$
4. In  $\triangle ABC$ ,  $BC = AB$  and  $\angle B = 80^\circ$ . Then  $\angle A$  is equal to
  - (a)  $80^\circ$
  - (b)  $40^\circ$
  - (c)  $50^\circ$
  - (d)  $100^\circ$
5. In  $\triangle PQR$ ,  $\angle R = \angle P$  and  $QR = 4\text{cm}$  and  $PR = 5\text{cm}$ . Then the length of PQ is
  - (a)  $4\text{cm}$
  - (b)  $5\text{cm}$
  - (c)  $2\text{cm}$
  - (d)  $2.5\text{cm}$
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  $AB = 5\text{cm}$ ,  $\angle B = 40^\circ$  and  $\angle A = 80^\circ$ . Then which of the following is true?
- (a)  $DF = 5\text{cm}$ ,  $\angle F = 60^\circ$
  - (b)  $DF = 5\text{cm}$ ,  $\angle E = 60^\circ$
  - (c)  $DE = 5\text{cm}$ ,  $\angle E = 60^\circ$
  - (d)  $DE = 5\text{cm}$ ,  $\angle D = 40^\circ$
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)  $BC = DE$