CBSE SAMPLE PAPER

Class IX- Triangles

Q.1 If $\Delta ABC \cong \Delta DEF$ and if AB=3.5 = DE and BC = EF = 5.5, then necessary condition is

(a) $\angle A = \angle D$ (b) $\angle B = \angle E$ (c)$\angle C = \angle F$ (d) CA = FD

Q.2 In $\Delta PQR, \angle R = \angle P$ and QR = 3cm and PR = 4.5cm. Then the length of PQ is

(a) 3cm (b) 5cm (c) 2 cm (d) 2.5cm.

Q.3 ABC is an isosceles triangle with AB = AC. Draw $AP \perp BC$. Then

(a) $\angle B = \angle C$ (b) $\angle B + \angle C = 90^0$ (c) AP=BP (d) BP≠PC.

Q.4 In the given figure OP = OQ and OS= OR. Then which is false?

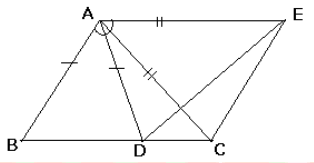
(a) $\Delta POS \cong \Delta QOR$ (B) RQ=FS (c) $\Delta POS \cong \Delta QOR$ (d) None of these

Q.5 In ΔABC, $\angle A = 100°$ and AB = AC, then $\angle B =$

(a) 40° (b) 60° (c) 30° (d) None of these

Section B . 2 Mark Each

Q.6 In the given figure, AC = AE, AB =AD and $\angle BAD = \angle EAC$ show that BC = DE.



Q.7 Prove that each angle of an equilateral triangle is 60°.

Section C . 3 Mark Each

Q.8 D is a point on side BC of ΔABC such that AD = AC. Show that AB> AD.

Section D . 4 Mark Each

Q.9 Prove that any two sides of a triangle are together greater than twice the median drawn to the third side.

Q.10 In right triangle ABC, right angled at C, M is the mid point of hypotenuse AB. C is joined to M and produced to a point D such that DM = CM. Point D is joined to point B. Show that

(i) $\Delta AMC \cong \Delta BMD$ (ii) $\angle DBC$ is a right angle

(iii)$\Delta DBC \cong \Delta ACB$ (iv) CM = 1/2 AB