

JSUNIL TUTORIAL

Punjabi colony gali no. 01

MM20

Triangles class IX

Time 45 Min

Section A MCQ . 1 Mark Each

Q.1 Which of the following is not a criterion for congruence of triangles?

(a) SAS (b) ASA (c) SSA (d) SSS

Q.2 The angles of a triangle are in the ratio 5:3:7 . The triangle is

(a) an acute angled triangle (b) an obtuse angled triangle

(c) an equilateral triangle (d) a right triangle.

Q.3 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.

Q.4 In a right angled triangle , one acute angle is double the other. Then,

(a) Hypotenuse=double the smallest side (b) Hypotenuse=triple the smallest side

(c) One acute angle is 48° (d) Δ is an isosceles.

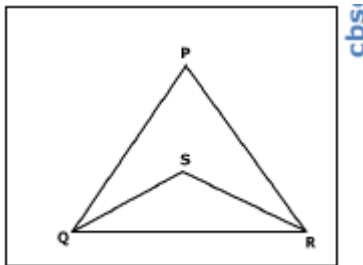
Q.5 ABC is an isosceles triangle with $AB = AC$. Draw $AP \perp BC$. Then

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

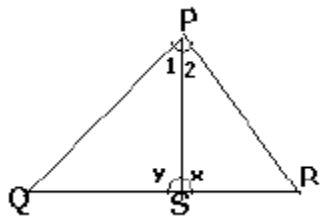
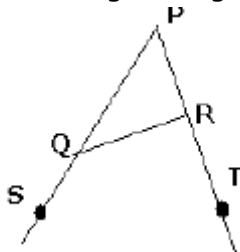
Section B . 2 Mark Each

Q.6 In the given figure $PQ > PR$ and QS and RS are the bisectors of $\angle Q$ and $\angle R$ respectively.

Show that $SQ > SR$.



Q.7 In the given figure, sides PQ and PR are produced and $\angle SQR < \angle TRQ$. Prove that $PR > PQ$.



Q.8 In the given figure, $PR > PQ$ and PS is the bisector of $\angle QPR$. Show that $X > Y$

Section C . 4 Mark Each

Q.9 Bisectors of the angles B and C of an isosceles triangle ABC with $AB=AC$ intersect each other at O . Show that external angle adjacent to $\angle ABC$ is equal to $\angle BOC$.

Q.10 If the bisector of an angle of a triangle also bisects the opposite side, prove that the triangle is isosceles.