

Instructions

- Honesty is the best policy.
- Start a new section from a new page

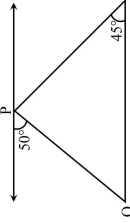
SECTION-A

Q1. The length of two sides of a triangle are 7cm and 9cm. The length of the third side may lie between:

- A 1cm and 10cm. B 2cm and 8cm.
C 3cm and 16cm. D 1cm and 16cm.

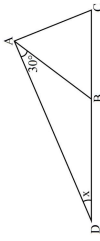
1 Mark

Q2. In the following figure, $m \parallel QR$. Then, the measure of $\angle QPR$ is.



1 Mark

Q3. In the following figure, $\triangle ABC$ is an equilateral triangle. Find $\angle X$



1 Mark

Q4. A triangle in which two sides are of equal lengths is called _____.

- A Scalene B Acute-angled
C Equilateral D Isosceles

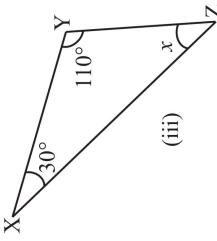
1 Mark

Q5. If two angles of a triangle are 60° each, then the triangle is:

- A Isosceles but not equilateral.
B Scalene.
C Equilateral.
D Right-angled.

1 Mark

Q6. Find the value of the unknown x in the following diagrams:



1 Mark

Q7. Answer the following in 'Yes' or 'No'.

Can an obtuse triangle be an isosceles triangle?

1 Mark

Q8. Can a triangle have all angles less than 60° ?

1 Mark

Q9. In the following pair of triangles of Figure, the lengths of the sides are indicated along the sides. By applying SSS congruence criterion, determine which triangles are congruent. If congruent, write the results in symbolic form.



1 Mark

Q10. Without drawing the triangles write all six pairs of equal measures in following pairs of congruent triangles.

$\triangle ABC \cong \triangle LMN$

1 Mark

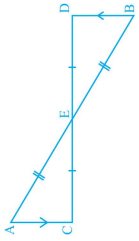
Q11. The longest side of a right angled triangle is called its _____.

1 Mark

Q12. In given pairs of triangles of Figure, using only RHS congruence criterion, determine which pairs of triangles are congruent. In case of congruence, write the result in symbolic form:

SECTION-B

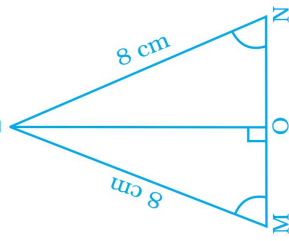
2 Marks



Q13. In given pairs of triangles of Figure, using only RHS congruence criterion, determine which pairs of triangles are congruent. In case of congruence, write the result in symbolic form:

2 Marks

1



Q14. In $\triangle ABC$, $\angle A = 100^\circ$, $\angle B = 30^\circ$, $\angle C = 50^\circ$. Name the smallest and the largest sides of the triangle.

2 Marks

Q15. Which of the following can be the sides of a right triangle?

- 2cm, 2cm, 5cm

2 Marks

Q16. State which of the following pairs of triangles are congruent. If yes, write them in symbolic form (you may draw a rough figure).

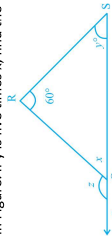
2 Marks

$\triangle ABC : AB = 4.8\text{cm}, \angle A = 90^\circ, AC = 6.8\text{cm}$

$\triangle XYZ : YZ = 6.8\text{cm}, \angle X = 90^\circ, ZX = 4.8\text{cm}$

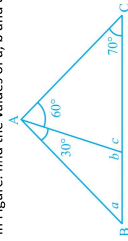
Q17. In Figure, if y is five times x , find the value of z .

3 Marks



Q18. In Figure, find the values of a , b and c .

3 Marks



Q19. The foot of a ladder is 6m away from its wall and its top reaches a window 8 m above the ground, if the ladder is shifted in such a way that its foot is 8m away from the wall, to what height does its top reach?

3 Marks