PRISM WORLD

Std.: 9 (English) **Maths - II** **Marks: 20**

Date: **Time: 1 hour**

Chapter: 1 to 3

Q.1 Choose the correct alternative. **(3)**

1) If the antecedent and consequent in a given conditional statement are interchanged, the resulting statement is called ..... of the given statement.

a. Proof b. Converse c. Direction d. None of the these

2) In a right angled traingle, the length of median on its hypotenus is ..... .

a. Half the length of hypotenuse

b. $\frac{1}{\sqrt{2}}$ hypotenuse

c. $\frac{\sqrt{3}}{2}$ hypotenuse

d. None of these

3) If the interior angles formed by a transversal of two distinct lines are supplementary, then two lines are parallel.

a. True b. False c. Can be both d. None of these

Q.2 Solve the following questions. (Any three) **(9)**

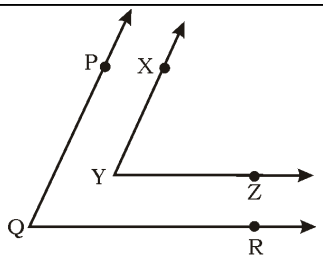
1) If two sides of a triangle are congurent then the angles opposite to them are congruent.

2) The following table shows points on a number line and their co-ordinate. Decide whether the pair of segments given below the table are congruent or not.

Point	A	B	C	D	E
Co-ordinate	- 3	5	2	- 7	9

seg DE and seg AB

3)

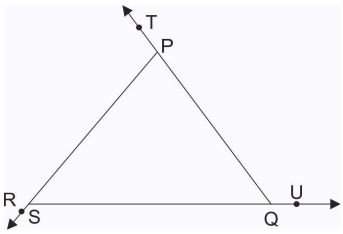


In the adjoining figure, corresponding sides of ∠PQR & ∠XYZ are parallel to each other.

Prove that ∠PQR ≅ ∠XYZ.

Construction. Extend ray XY to Intersect ray QR at point A, Q-A-R

4) If the sides of a triangle are produced in order as shown in the adjoining figure, prove that the sum of the exterior angles so formed is equal to four right angles.



Q.3 Solve the following questions. (Any two) **(8)**

1) Prove that -

Theorem: If two parallel lines are intersected by transversal, the interior angles on either side of the transversal are supplementary.

Prism
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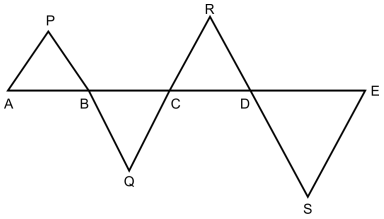
2)

In the figure, l(AC) = 8, l(BC) = 5

Seg BD ≅ seg CE ≅ seg AC, then determine whether the segments in each of the following pairs are congruent or not.

i. seg BC and seg DE

ii. seg AB and seg CD.



3)

In □PQRS, side PS ∥ side QR and side PQ ≅ side SR, Side QR > side PS then prove that

∠PQR ≅ ∠SRQ