INDIAN SCHOOL AL WADI AL KABIR

Class VII, Mathematics

WORKSHEET -GEOMETRIC TWINS

Multiple Choice Questions

Q.1 What is the additional information required if $\Delta XYZ \cong \Delta LMN$ by RHS Congruence rule; given that $\angle Y = \angle M = 90^o$, YZ = MN?

	A	XY = LM	**B**	XY = MN	**C**	XZ = LN	**D**	YZ = LM

Q.2 If $\angle A = \angle R$, $\angle B = \angle P$ and AB = RP, then by which congurence condition $\Delta ABC \cong \Delta RPQ$?

	A	SAS	**B**	RHS	**C**	SSS	**D**	ASA

Q.3 The following triangles are congruent under the correspondence PRQ ↔ XYZ. The part of ΔXYZ correspond to PQ is:

	A	XY	**B**	YZ	**C**	XZ	**D**	YX

Q.4 Among two congruent angles, one has a measure of 70°; the measure of the other angle is:

	A	80°	**B**	70°	**C**	75°	**D**	100°

Q.5 If ΔBCA ≅ ΔDEF, write the part of ΔDEF that correspond to $\angle A$.

	A	$\angle E$	**B**	EF	**C**	$\angle F$	**D**	DF

Descriptive Type Questions

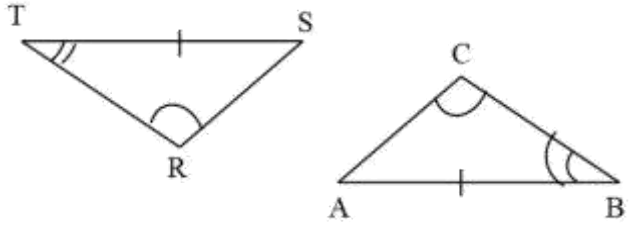
Q.6 Consider $\Delta ABC \cong \Delta PQR$ where AB = PQ = 8 cm, BC = QR = 6cm and $\angle B = \angle Q = 90^\circ$

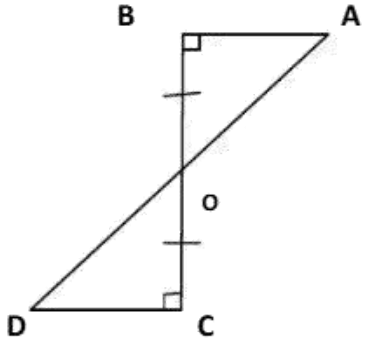
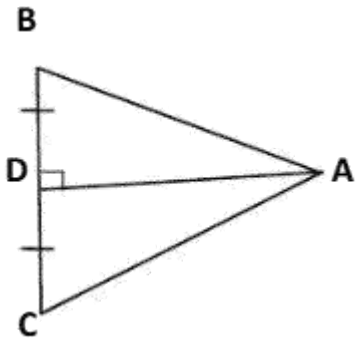
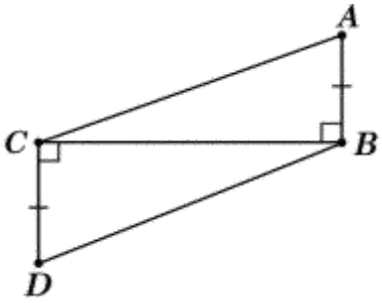
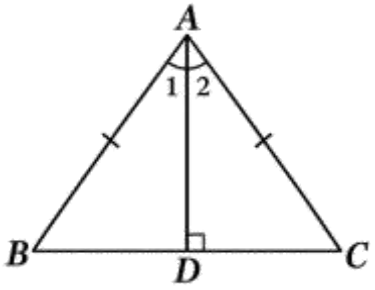
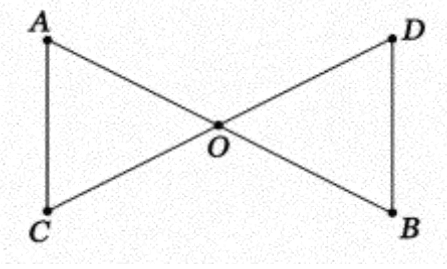
Answer the following:

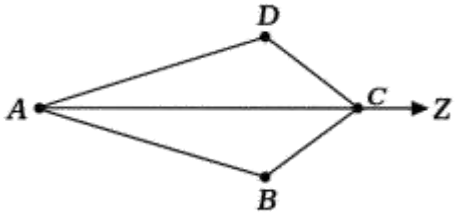
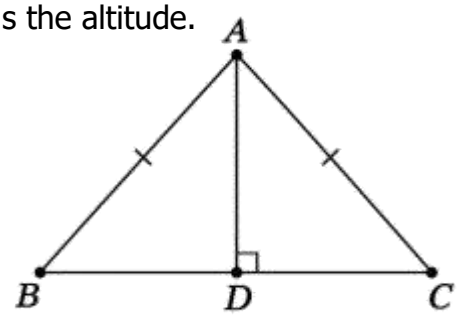
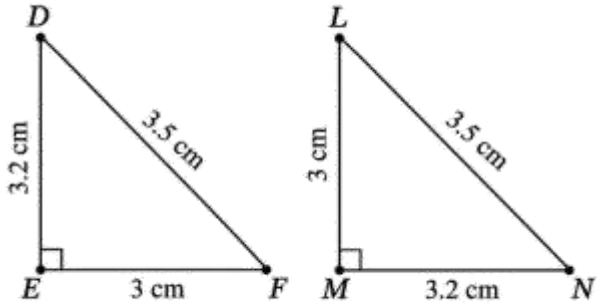
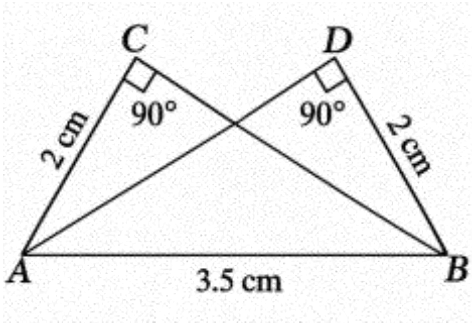
(a) Which congruence criterion applies?

(b) If AC = 10cm and $\angle A = 35^\circ$, find PR and $\angle P$.

Q.7 Prove that ΔTSR ≅ ΔBAC using a suitable triangle congruence criterion.



Q.8	In the figure, O is the midpoint of BC and $\angle B = 90^\circ$, $\angle C = 90^\circ$, show that $\Delta AOB \cong \Delta DOC$. 
Q.9	In the figure $AD \perp BC$. D is the midpoint of BC. Show that $\Delta ABD \cong \Delta ACD$. Is AB = AC? Why? 
Q.10	In the given figure prove that i) $\Delta ABC \cong \Delta DCB$ ii) AC = DB 
Q.11	In the given figure; $\angle 1 = \angle 2$ and AB = AC. Prove that: i) $\angle B = \angle C$ ii) BD = DC iii) AD is perpendicular to BC 
Q.12	In figure, $\angle A = \angle B$, AO = BO Is $\Delta AOC \cong \Delta BOD$? (Give reason) 

Q.13	In figure AD=AB, Ray AZ bisects ∠BAD, state the equal parts of ∆ADC and ∆ABC. Write the congruence in symbolic form. 
Q.14	∆ABC is an isosceles triangle with AB =AC and AD is the altitude. (a) Is ∆ ADB ≅ ∆ ADC? (b) Is ∠B = ∠C? (c) Is BD = CD? Give reason. 
Q.15	Identify the congruent parts of given triangles and write the congruency in symbolic form.  **(i)**  **(ii)**

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