INDIAN SCHOOL AL WADI AL KABIR
Department: Mathematics
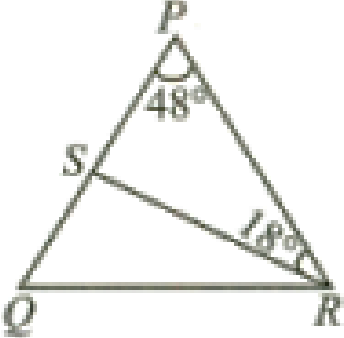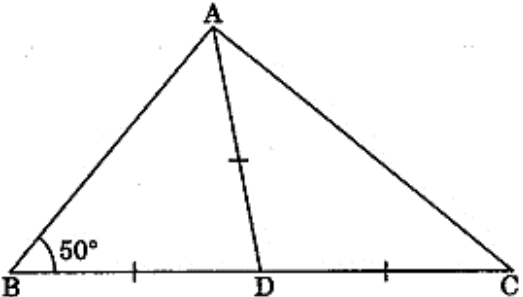### Class IX   Worksheet – Triangles   22-08-2021

(MCQ) 1mark each

Q.1.	In the isosceles ΔABC if AB =AC and ∠A = 40°, then find the measure of ∠B.						
	A	40°	**B**	75°	**C**	70°	**D**	140°

Q.2.	If in a triangle ABC, ∠A +∠B = 105°, ∠B + ∠C = 120°, then ∠B is						
	A	70°	**B**	75°	**C**	45°	**D**	60°

Q.3.	If $\Delta ABC \cong \Delta DEF$, then						
	A	AC = DE	**B**	BC = DF	**C**	AB = DF	**D**	FE = CB

Q.4.	If AB = QR, BC = RP and CA = PQ, then						
	A	$\Delta ABC \cong \Delta PQR$	**B**	$\Delta CBA \cong \Delta PRQ$	**C**	$\Delta BAC \cong \Delta RPQ$	**D**	$\Delta BCA \cong \Delta PQR$

Q.5.	In ΔABC and ΔDEF, AB = DE, ∠A = ∠D. The two triangles will be congruent by SAS congruence if						
	A	BC = EF	**B**	AC = DF	**C**	AC = EF	**D**	BC = DF

Q.6.	In ΔABC, AB = AC, ∠B = 40°, then ∠C is equal to						
	A	50°	**B**	140°	**C**	80°	**D**	40°

Q.7.	In ΔABC, AB = BC, ∠B = 50°, then ∠A is equal to						
	A	130°	**B**	45°	**C**	65°	**D**	100°

Q.8.	In ΔABC and ΔPQR, if AB = PQ, ∠A = ∠P, ∠B = ∠Q, then which one of the congruence conditions apply.						
	A	ASA	**B**	SAS	**C**	SSS	**D**	RHS

Q.9.	In a right - angled triangle, if one acute angle is half the other, then the smallest angle is						
	A	30°	**B**	15°	**C**	25°	**D**	35°

Q.10.	In the given figure, PQ = QR, ∠QPR = 48°, ∠SRP = 18°, then ∠PQR is						
	A	48°	**B**	84°	**C**	30°	**D**	36°

Q.11.	A right - angled isosceles triangle ABC is right angled at A. Then ∠B is						
	A	45°	**B**	60°	**C**	30°	**D**	90°

Q.12.	Which of the following is not a criterion for congruence of triangles?						
	A	SAS	**B**	SSS	**C**	ASA	**D**	SSA

Q.13.	ΔABC ≅ ΔFDE in which AB = 6 cm ∠B = 40°, ∠A = 80° and FD = 6 cm, then ∠E is						
	A	50°	**B**	80°	**C**	60°	**D**	40°

Q.14.	In ΔABC, ∠C = ∠A and BC = 4 cm and AC = 5 cm, then find length of AB.						
	A	5cm	**B**	4cm	**C**	3cm	**D**	3.5cm

Q.15.	In figure, D is the mid-point of side BC of a ΔABC and ∠ABD = 50°. If AD = BD = CD, then find the measure of ∠ACD.						
	A	30°	**B**	70°	**C**	80°	**D**	40°

ASSERTION AND REASON Type Questions (1 mark each)	
	DIRECTION: In each of the following questions, a statement of Assertion is given followed by a corresponding statement of Reason just below it. Choose the correct statement from the options as: A) Both assertion and reason are true and reason is the correct explanation of assertion. B) Both assertion and reason are true but reason is not the correct explanation of assertion. C) Assertion is true but reason is false. D) Assertion is false but reason is true.
Q.16.	**Assertion:** If we draw two triangles with angles 30°, 70°, and 80° and the length of the sides of one triangle be different than that of the corresponding sides of the other triangle then two triangles are not congruent. **Reason:** If two triangles are constructed which have all corresponding angles equal but have unequal corresponding sides, then two triangles cannot be congruent to each other.
Q.17	**Assertion:** In $\triangle ABC$ and $\triangle PQR$, $AB = PQ$, $AC = PR$ and $\angle BAC = \angle QPR$, then $\triangle ABC \cong \triangle PQR$. **Reason:** Both the triangles are congruent by SSS

Answers										
Answers	**Q.1**	C	**Q.2**	C	**Q.3**	D	**Q.4**	B		
	Q.5	B	**Q.6**	D	**Q.7**	C	**Q.8**	A		
	Q.9	A	**Q.10**	B	**Q.11**	A	**Q.12**	D		
	Q.13	C	**Q.14**	B	**Q.15**	D	**Q.16**	A	**Q.17**	C

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