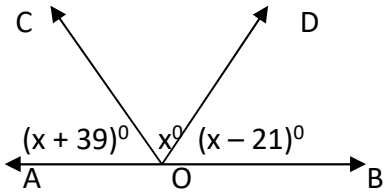
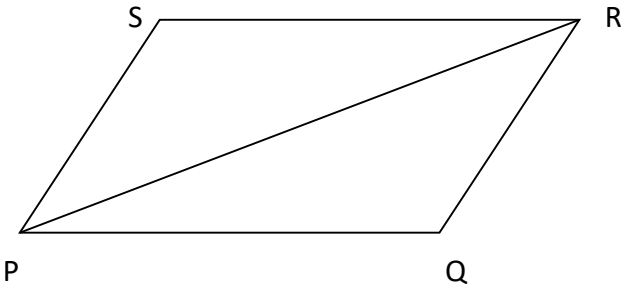
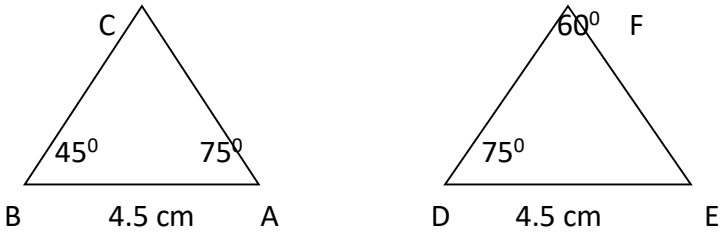
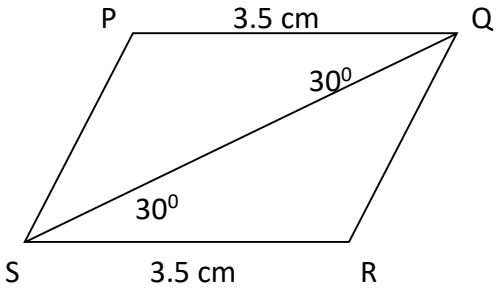
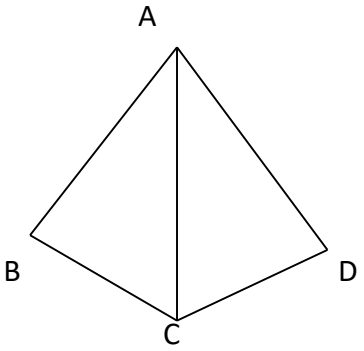
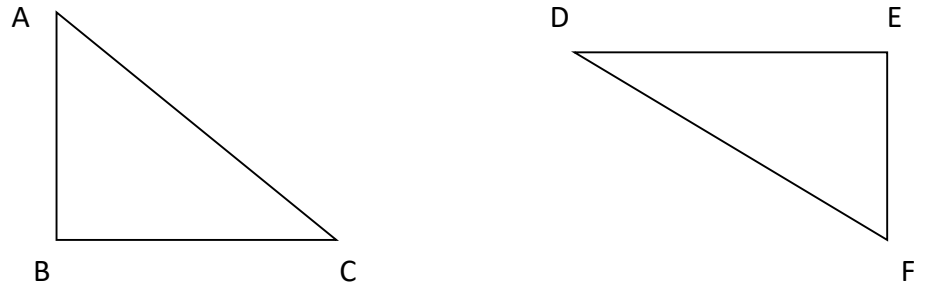
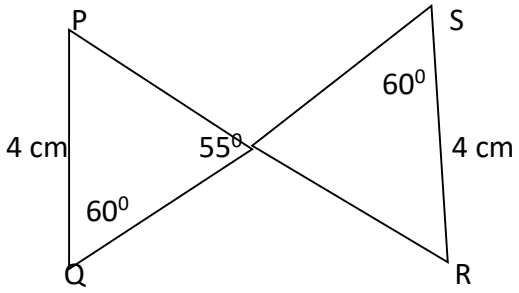
INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : Mathematics	Topic :Congruence Of Triangle	Date of Worksheet : _____
Resource Person : Mrs Bhavya Vijelesh		Date : _____
Name of the Student :_____	Class & Division :VII __	Roll Number : __

S.No.	Section A(Basic Skills)	Marks
1	Find <AOC, <COD and <BOD.  	**2**
2	Two angles forming a linear pair are in the ratio 4 : 5. Find the angles.	**2**
3	Is it possible to draw a triangle with the following sides? (a) 2 cm, 3cm, 4cm (b) 7.5cm, 3.5cm, 1.5cm	**2**
4	The angles of a triangle are $(x + 10)^0$, $(x + 40)^0$ and $(2x - 30)^0$. Find the measure of all the angles and assign the name of the triangle.	**2**
	Section B	
5	Identify the corresponding parts of the congruent triangles. 1) ΔABC ≅ ΔPQR. Then , a) AB = _____ b) BC = _____ c) CA = _____ d) ∠A = _____ e) ∠B = _____ f) ∠C = _____	1
6	2) In ΔABC, AB = 5cm, BC = 6cm and CA = 4cm. ΔABC ≅ ΔXYZ then measure of a) ZX = _____ b) YX = _____ c) ZY = _____	1
7	3) In ΔPQR, $\angle P = 50^0$, $\angle Q = 85^0$. In ΔABC, $\angle C = 45^0$. ΔPQR ≅ ΔABC, then a) ∠A = _____ b) ∠B = _____ c) ∠R = _____	1
8	4) Triangles ABC and PQR are congruent right angled triangles. $\angle B = 90^0$, AC = PQ and AB =PR, then a) BC = _____ b) ∠ A = _____ c) ∠Q = _____	1

9	PQ = RS and PS = RQ  (a) Is $\Delta RSP \cong \Delta PQR$? (b) Which congruence condition you have used? (c) Write the fact used which is not given in the question.	3
10	It is given that in ΔABC, AB = 4.5, $\angle A = 75^0$, $\angle B = 45^0$ and in ΔDEF, DE = 4.5 cm, $\angle D = 75^0$ and $\angle F = 60^0$. Are the two triangles ABC and DEF congruent by ASA congruence condition?  	3
11	By applying SAS congruent rule, state the pairs of congruent triangles in the following figure.  	3
12	In the figure AB = AD and AD is perpendicular to CD and AB is perpendicular to BC. Find (a) The third pair of corresponding part so that $\Delta ABC \cong \Delta ACD$ by RHS congruence condition. (b) Is BC = DC? Why?	3

		
	Section C(Hot Questions)	
13	In the given figure <A = <F, <B = <E = 90^0 and BC = DE. Explain Why ΔABC ≅ ΔFED 	3
14	Prove that ΔPQT ≅ ΔRST. 	3