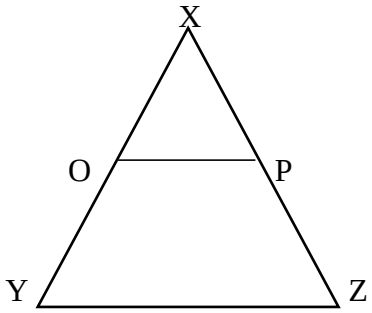
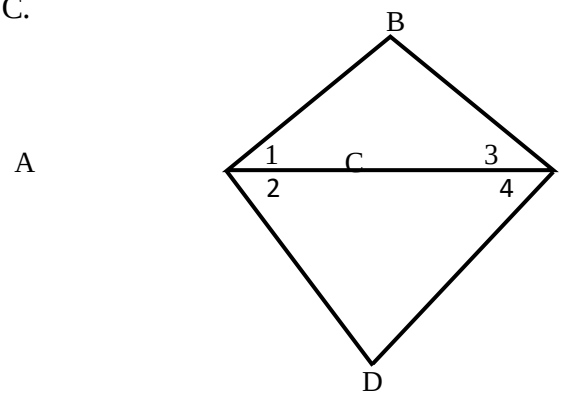
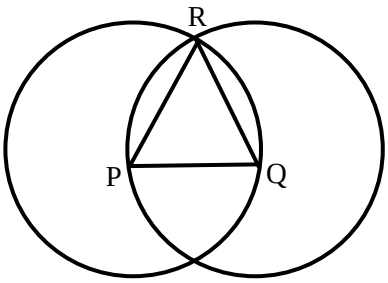
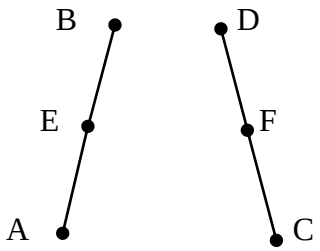
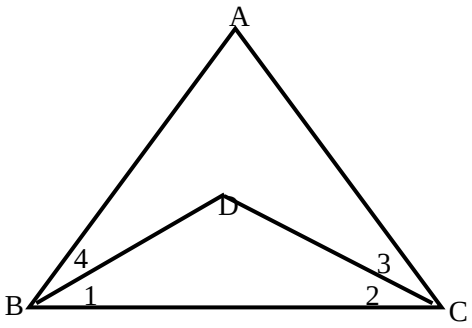
INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : Mathematics	Topic:Introduction to Euclid 's Geometry	Date of Worksheet : 4-6-2018
Worksheet No:5		
Resource Person: Mrs. Sunitha Rajeev		Date : _____
Name of the Student :_____	Class &Division : IX	Roll Number : __

	Section A (Basic Skill)	**Marks**
1.	An angle is 25^0 more than its complement. What is its measure?	1
2.	The measure of an angle is 3 times its supplement, then find the angles.	1
3.	Find the perimeter of a rectangle whose length and breadth are respectively 25 cm and 10cm.	1
4.	If QS lies between QP and QR. Given that $\angle PQR = 80^0$ and $\angle PQS = 35^0$, determine the measure of $\angle RQS$.	1
	Section B	
1.	Prove that every line segment has one and only one midpoint.	2
2.	C is the midpoint of AB and D is the midpoint of AC. Prove that $AD = \frac{1}{4} AB$. Explain by drawing the figure.	3
3.	If a point C lies between two points A and B such that AC = BC, then prove that $AC = \frac{1}{2} AB$. Explain by drawing the figure.	3
4.	In the given figure if $OX = \frac{1}{2} XY$, $PX = \frac{1}{2} XZ$ and OX = PX, show that XY = XZ. 	3
5.	In the given figure , we have $\angle 1 = \angle 3$ and $\angle 2 = \angle 4$. Show that, $\angle A = \angle C$. 	4

6.	P and Q are the centres of two intersecting circles. Prove that PQ = QR = PR. 	4
	Section C	
1.	Solve the equation x – 15= 25 and state Euclid's axiom used here.	2
2.	In figure , AE = DF, E is the midpoint of AB and F is the midpoint of DC. Using an Euclid's axiom, show that AB = DC. 	3
3.	In the given figure, we have ∠ABC = ∠ACB, ∠3 = ∠4. Show that ∠1= ∠2. 	4