



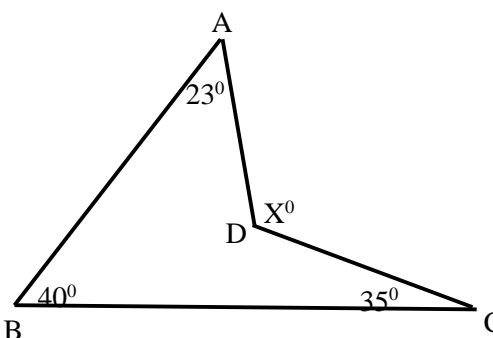
**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF MATHEMATICS**



Subject : Mathematics                      Topic : Lines And Angles                      Date of Worksheet : 24-8-2017  
Worksheet No: 7

Resource Person: Mrs. Anu Likson                      Date : \_\_\_\_\_

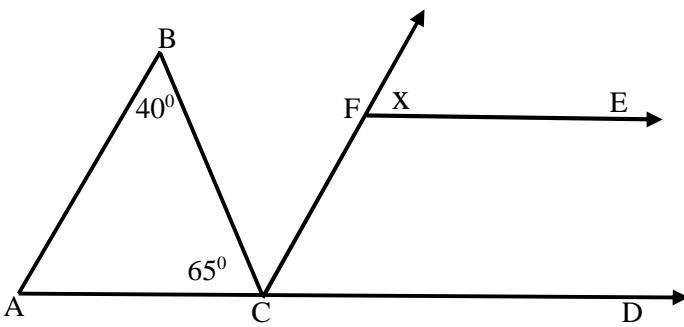
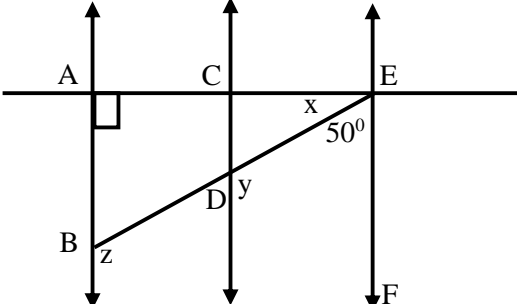
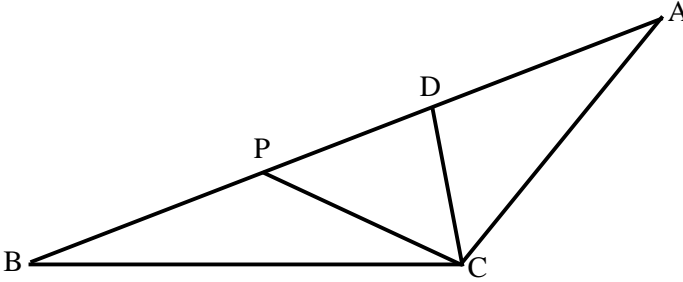
Name of the Student : \_\_\_\_\_                      Class & Division : IX .....                      Roll Number : \_\_\_\_

<b>Section A (Basic Skill)</b>		<b>Marks</b>
<u>Evaluate</u>		
1.	$\frac{8}{2} \times \frac{5}{1}$	1
2.	$\frac{8}{9} \times \frac{3}{6}$	1
3.	$2\frac{4}{7} \div \frac{4}{1}$	1
4.	$7\frac{5}{6} + 4\frac{2}{5} - 6\frac{2}{1}$	1
5.	What should be added to $\left[\frac{5}{6} - \frac{7}{8}\right]$ to get $\frac{1}{2}$ ?	1
<b><u>Section B</u></b> Answer the following questions:		
1.	In $\Delta ABC$ , if $\angle A = (2x - 5^\circ)$ , $\angle B = (5x + 5^\circ)$ , $\angle C = (3x + 50^\circ)$ , then find the value of $x$ , $\angle A$ , $\angle B$ and $\angle C$ .	2
2.	Prove that if one angle of a triangle is equal to the sum of the other two angles, then the triangle is right angled triangle.	2
3.	In the given figure, find the value of $x^\circ$ . 	3



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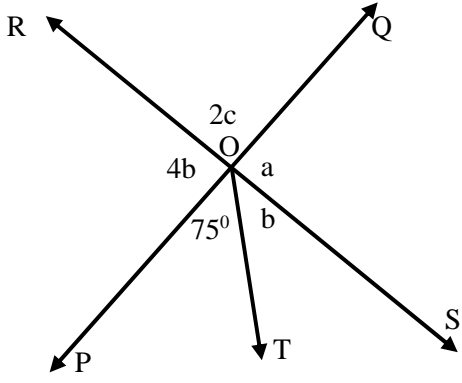
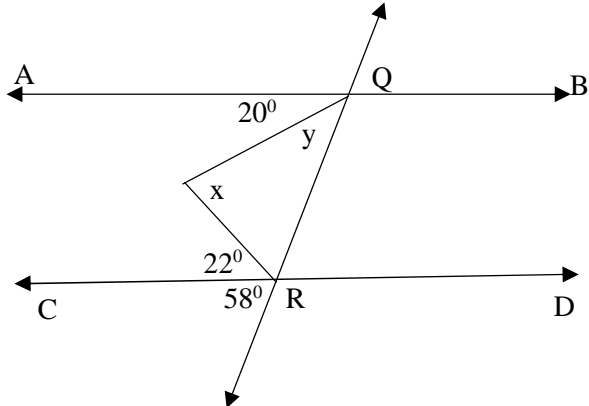
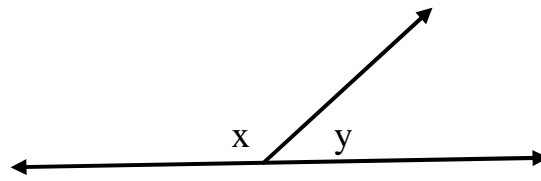


4.	<p>In the figure, if <math>AB \parallel CF</math> and <math>CD \parallel FE</math>, then find the value of <math>x</math>.</p> 	3
5.	<p>In a <math>\Delta ABC</math>, <math>\angle A + \angle B = 116^\circ</math> and <math>\angle B + \angle C = 126^\circ</math>. Find the measure of each angle of the triangle.</p>	3
6.	<p>In the given figure <math>AB \parallel CD \parallel EF</math>. <math>EA</math> is perpendicular to <math>AB</math>, <math>\angle BEF = 50^\circ</math>. Find the values of <math>x</math>, <math>y</math> and <math>z</math>.</p> 	3
7.	<p>In the given figure, <math>\angle ACD = \angle ABC</math> and <math>CP</math> bisects <math>\angle BCD</math>. Prove that <math>\angle APC = \angle ACP</math>.</p> 	4



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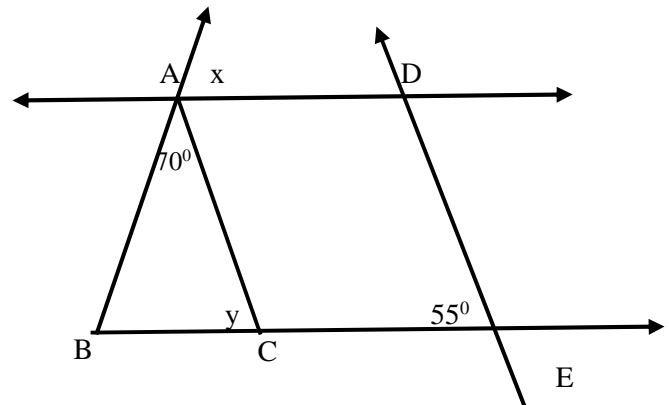
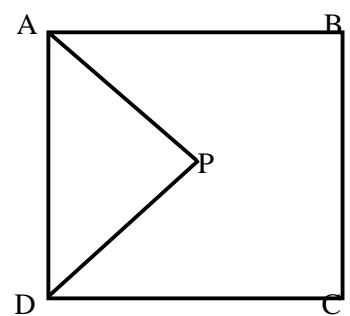
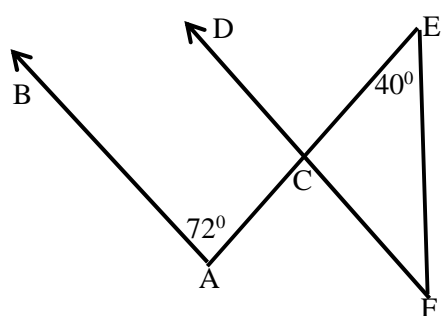
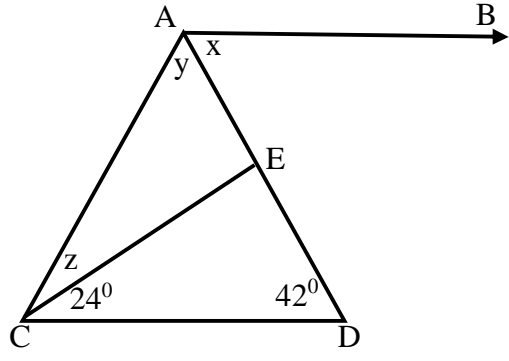


8.	<p>In the given figure, two straight lines PQ and RS intersect each other at O. If <math>\angle POT = 75^\circ</math>, find the values a, b, c.</p> 	4
9.	<p>In the given figure, find the value of x and y if <math>AB \parallel CD</math>.</p> 	4
10.	<p>Prove that the sum of three angles of a triangle is <math>180^\circ</math>. Also find the angles of a triangle if they are in the ratio 5 : 6 : 7.</p>	4
<p><b><u>Section C</u></b></p>		
1.	<p>In the given figure, x is greater than y, by <math>\frac{1}{6}</math> of a straight angle. Find the value of x and y.</p> 	3



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2.	<p>In the given figure, <math>AC \parallel DE</math> and <math>AD \parallel CE</math>, find <math>x</math> and <math>y</math>, when it is given that <math>\angle BAC = 70^\circ</math> and <math>\angle DEC = 55^\circ</math>.</p> 	3
3.	<p>In the given figure, <math>AP</math> and <math>DP</math> are bisectors of <math>\angle A</math> and <math>\angle D</math>. Prove that <math>2\angle APD = \angle B + \angle C</math>.</p> 	4
4.	<p>In the given figure, <math>AB \parallel CD</math>, <math>\angle BAC = 72^\circ</math> and <math>\angle CEF = 40^\circ</math>. Find <math>\angle CFE</math>.</p> 	4
5.	<p>In the given figure, <math>AB \parallel CD</math>, <math>\angle ECD = 24^\circ</math>, <math>\angle EDC = 42^\circ</math> and <math>AC = CE</math>. Find <math>x</math> and <math>y</math>.</p> 	4



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