

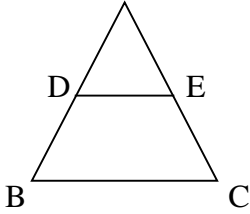
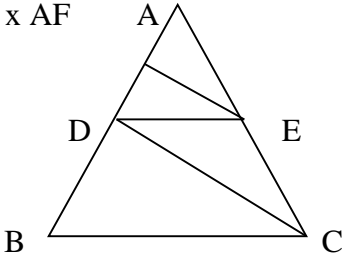
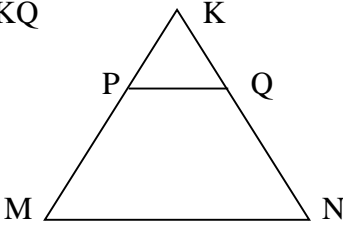


**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF MATHEMATICS**  
**WORKSHEET # 11**



Subject : MATHEMATICS	Topic : TRIANGLES [BPT]	Date of Worksheet : 05/08/2017
Resource Person: Mrs. Indu .P		Date of submission : 07/08/2017
Name of the Student _____	Class & Division: _____	Roll Number : ____

S.No.	Section A-[Basic skills]
1.	$\frac{5}{7} = \frac{x}{14}$ then find the value of x.
2.	Find the third angle of triangle ABC whose two angles are $45^\circ$ and $55^\circ$
3.	If $y^2 = 2025$ , find the value of y.
4.	$23.5 \times 45.6 =$
5.	$3040 \div 30 =$

Sl.No.	Section B -[Chapter based questions]	Marks
1.	<p>In the given figure , in <math>\triangle ABC</math> , <math>DE \parallel BC</math> , so that <math>AD = (7x - 4)</math> cm , <math>AE = (5x - 2)</math> cm, and <math>DB = (3x + 4)</math>cm and <math>EC = 3x</math> cm. Find the value of x.</p> <div style="text-align: center;">  </div>	2
2.	<p>In figure , <math>DE \parallel BC</math> and <math>CD \parallel EF</math> . Prove that <math>AD^2 = AB \times AF</math></p> <div style="text-align: center;">  </div>	2
3.	<p>P and Q are points on the sides AB and AC respectively of <math>\triangle ABC</math> such that <math>AP = 3.5</math> cm , <math>PB = 7</math> cm , <math>AQ = 3</math> cm and <math>QC = 6</math> cm . If <math>PQ = 4.5</math> cm , find BC.</p>	2
4.	<p>In the figure , <math>PQ \parallel MN</math>. If <math>\frac{KQ}{PQ} = \frac{4}{1}</math> and <math>KN = 20.4</math> cm , find KQ</p> <div style="text-align: center;">  </div>	1



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5.	<p>Let ABC be a triangle and D and E be two points on side AB such that AD = BE .If DP <math>\parallel</math> BC and EQ <math>\parallel</math> AC , then prove that PQ <math>\parallel</math> AB.A</p>	3
6.	<p>Prove that any line parallel to the parallel sides of a trapezium divides the non – parallel sides proportionally.</p>	4
7.	<p>In the figure , two triangles ABCand DBC lie on the same side of base BC.P is a point on BC such that PQ <math>\parallel</math> BA and PR <math>\parallel</math> BD . Prove that QR <math>\parallel</math> AD.</p>	4
<b>SECTION C [ HOT QUESTIONS]</b>		
8.	<p>If three or more parallel lines are intersected by two transversals , prove that the intercepts made by them on the transversals are proportional.</p>	4
9.	<p>In the figure , P is the midpoint of BC and Q is the midpoint of AP. If BQ when produced meets AC at R , prove that <math>RA = \frac{1}{3}CA</math></p>	3
10.	<p>In the figure if EF <math>\parallel</math> DC <math>\parallel</math> AB , prove that <math>\frac{A}{E} = \frac{B}{F}</math></p>	4



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