



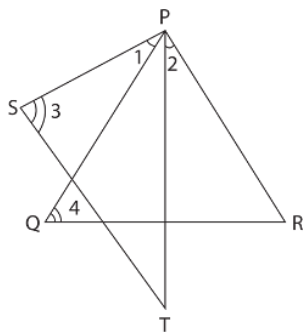
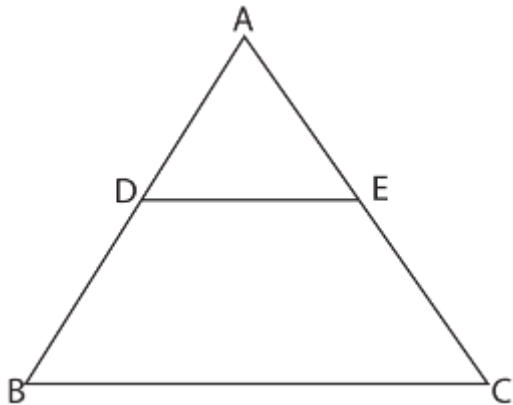
INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS CH:6-TRIANGLES

Name: _____

Date: _____

Class: X Sec: ____

1.	An aero plane flies due north at a speed of 500 km/hr. At the same time another aero plane leaves the same airport & it is due east at speed of 600 km/hr. How far they will be apart after $2\frac{1}{2}$ hrs?
2.	If $\triangle ABC \sim \triangle DEF$, $BC = 6$ cm, $EF = 8$ cm and area $(\triangle ABC) = 108$ cm ² find area $(\triangle DEF)$
3.	In the given figure $\angle 1 = \angle 2$, $\angle 3 = \angle 4$. Show that $PT \cdot QR = PR \cdot ST$ 
4.	In $\triangle ABC$, $AD \perp BC$. Prove that $AC^2 = AB^2 + BC^2 - 2 \cdot BD \cdot BC$.
5.	In $\triangle ABC$, $\angle B = \angle C$, $BD = CE$ prove that $DE \parallel BC$ 
6.	ABC is a triangle right angled at C. If CD, the length of perpendicular from C on AB is p, $BC = a$, $AC = b$ and $AB = c$, then prove that $\frac{1}{p^2} = \frac{1}{a^2} + \frac{1}{b^2}$.
7.	Find the length of the altitude of an equilateral triangle of side 6 cm.
8.	$\triangle ABC \sim \triangle DEF$. $AL \perp BC$, $DM \perp DF$. If $AL = 4$ cm, $DM = 5$ cm & Area(ABC) = 20 cm ² then find area(DEF).
9.	Prove that the equilateral triangles described on the two sides of right angled triangle are together equal to the equilateral triangle described on the hypotenuse in terms of their areas
10.	In figure, $AB \perp BC$, $DE \perp AC$ and $HG \perp AB$. Prove that $\triangle AGH \sim \triangle DEC$



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11.	If $\triangle XYZ \sim \triangle BMP$, $\angle Y = 120^\circ$, $\angle B = 30^\circ$ then find $\angle P$
12.	AB & CD are two chords intersecting at E. Show that $EA \cdot BD = ED \times CA$
13.	In a trapezium, the diagonals divide each other in the ratio of 1 : 3. Find the ratio of the parallel sides.
14.	One angle of a triangle is equal to one angle of another and bisectors of these equal divide the opposite sides in the same ratio. Prove that the triangles are similar.
15.	Find the length of the altitude of an equilateral triangle of side 6 cm.