INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : Mathematics Topic : Triangle & Its Properties(7) Date of Worksheet : _____

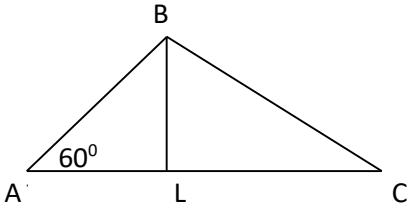
Resource Person: Mrs Bhavya Vijelesh Date : _____

Name of the Student :_____ Class & Division :VII__ Roll Number : __

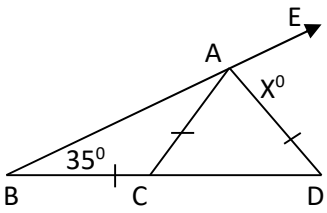
S.No.	Section A(Basic Skills)	Marks
1	Name the types of following triangles: (a) Triangle with lengths of sides 7 cm, 8 cm and 9 cm (b) Triangle XYZ with m<Y = 90^0 and XY = YZ. (c) Triangle LMN with m<L = 30^0, m <M = 70^0 and m<N = 80^0.	1
2	Fill in the blanks with acute, obtuse, right or straight (a) When the sum of the measures of two angles is that of a right angle, then each one of them is _____ (b) When the sum of the measures of two angles is that of a straight angle and if one of them is acute then the other should be_____ (c) An angle whose measure is the sum of the measures of two right angles is_____	1
3	Find the number of right angles turned through by the hour hand of a clock when it goes from (a) 3 to 6 (c) 2 to 8 (b) 12 to 9 (d) 5 to 11	1

Section B

4	Is it possible to draw a triangle with the following sides? (a) 2 cm, 3cm,4cm (b) 7.5cm, 3.5cm, 1.5cm	2
5	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
6	In the given figure triangle ABC is a right triangle, right angled at B. BL is drawn perpendicular to AC. If <A = 60^0, find <BCA, <CBL and <ABL.	3



7 In the figure the measures of some of the angles have been marked and <BAC = 35^0. Find the value of x. 3



8 A 17 m long ladder reached a window 15m high from the ground on placing it against a wall at a distance a. Find the distance of the foot of the ladder from the wall. 3

Section C(Hot Questions)

9 A tall tree is broken at a height of 8 m from the ground and its top touches the ground at distance of 15 m from the base of the tree. Find the original height of the tree. 4

10 The diagonals of a rhombus measure 16 cm and 30 cm. Find its perimeter. 4

11 In the given figure PR is perpendicular to RT and <P : <Q : <PRQ = 3:2:1. Find the value of <TRS 4