

INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT – 2
MATHEMATICS

Set - 1

Class: X
Date: 01/06/14

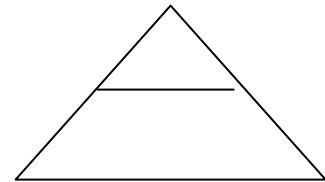
Time: 40 Mts
Marks: 20

General Instructions

1. All questions are compulsory.
2. The question paper consists of 09 questions divided into four sections A, B, C and D. Section A comprises of 3 questions of one mark each, section B comprises of 2 questions of 2 marks, section C comprises of 03 questions of 3 marks each, and section D comprises 1 question of four marks each.

SECTION – A

1. If $x = a$, $y = b$ is the solution of the pair of equations $x - y = 4$ and $x + y = 5$, find the values of “a” and “b”
2. If $4x - 3y = 7$ is the given equation, Write two equations, one is parallel to the given line and the other is having unique solution with the given equation.
3. In the following figure, $AD = 1.5$ cm, $DB = 2$ cm, $AE = 1$ cm and DE parallel to BC find AC



SECTION – B

4. For what value of “k” will the pair of equations $kx + 3y - (k - 3) = 0$ and $12x + ky - k = 0$ have infinitely many solutions,
5. In a trapezium prove that the diagonals intersect each other proportionately.

SECTION – C

6. Determine graphically whether the pair of linear equations $2x - 3y = 0$ and $x + y = 5$ is consistent or inconsistent
7. If a line drawn parallel to any side of the triangle divides the other side proportionately – Prove
8. Using the converse of basic proportionality theorem prove that the line joining the mid-points of any two sides of a triangle is parallel to the third side.

SECTION – D

9. A person can row 8 km upstream and 24 km downstream in 4 hours. He can row 12 km downstream and 12 km upstream in 4 hours. Find the speed of person in still water and also the speed of the current.