

INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT – 2
MATHEMATICS

Set - 2

Class: X
Date: 01/06/14

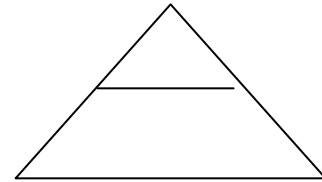
Time: 40 Mts
Marks: 20

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.
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SECTION – A

1. If $x = a$, $y = b$ is the solution of the pair of equations $x - y = 2$ and $x + y = 4$, find the values of “a” and “b”
2. If $3x - 4y = 5$ 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, $AD = 3$ cm, $DB = 4.5$ cm, $AE = 5$ cm and DE parallel to BC , find AC



SECTION – B

4. For which value of “k” will the following pair of linear equations have no solution $3x + y = 1$ and $(2k - 1)x + (k - 1)y = 2k + 1$
5. In a quadrilateral if the diagonals intersect each other proportionately prove that it is a trapezium

SECTION – C

6. Determine graphically whether the pair of linear equations $2x - y = 4$ and $x + y = 5$ is consistent or inconsistent
7. Using basic proportionality theorem, prove that a line drawn through the mid-point of one side of a triangle parallel to another side bisects the third side.
8. If a line drawn parallel to any side of the triangle divides the other side proportionately – Prove

SECTION – D

9. A boat goes 24 km upstream and 28 km downstream in 6 hours. It goes 30 km upstream and 21 km downstream in $6\frac{1}{2}$ hours. Find the speed of the boat in still water