# INDIAN SCHOOL SOHAR <br> FORMATIVE ASSESSMENT- 3 <br> MATHEMATICS 

Date: 10-11-2013
Class: IX
Time: 45 mnts
Marks: 25

General Instructions:

- All questions are compulsory.
- Section $A$ comprises 3 questions of 1 mark each.
- Section B comprises 4 questions of 2 marks each.
- Section C comprises 2 questions of 3 marks each.
- Section D comprises 2 questions of 4 marks each.


## SECTION A

1. If the points $(1,0)$ and $(0,1)$ lie on the graph of the equation $y=p x+q$, then find the values of $p$ and $q$.
2. The graph of $x=m$ is a straight line parallel to which axis.
3. In $\triangle P Q R, S, T$ and $U$ are the mid-points of the sides $P Q, Q R$ and $P R$ respectively. If $P R=8.2 \mathrm{~cm}$, then find the value of $S T$.

## SECTION B

4. If the point $(2 p-3, p+2)$ lies on the graph of the equation $2 x+3 y+15=0$, find the value of $p$.
5. Give the equation of one line passing through $(1,7)$.How many more such lines are there and why?
6. Determine the solution of the linear equation $2 x+5 y=19$, whose ordinate is $1 \frac{1}{2}$ times of its abscissa.
7. In a rhombus $P Q R S$, diagonals bisect each other at O . If area of the rhombus is $50 \mathrm{~cm}^{2}$, $P O=5 \mathrm{~cm}$, find the length of $Q S$.

## SECTION C

8. Prove that, a diagonal of a parallelogram divides it into two congruent triangles.
9. Show that the bisectors of angles of a parallelogram form a rectangle.

## SECTION D

10. Draw the graph of the linear equation $8 x+2 y=12$. At what points the graph of the equation cuts the X -axis and Y -axis ?
11. PQRS is a rhombus and $A, B, C$ and $D$ are the mid-points of the sides $P Q, Q R, R S$ and PS respectively. Show that the quadrilateral ABCD is a rectangle.
