INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS

4. Linear equation in two variables

5 Introduction to Euclid's Geometry

Name: _____ Date:_____ Class: IX Sec: ___

1.	Write each of the following equations in the form of ax+by+c=0 and indicate the values of a,b, and c in each case: a) $3x + 2y = 2.5$ b) $7x - 5 = 2y$ c) $x = 2y$ d) $\frac{x}{2} - \frac{y}{3} = 5$ e) $2y - 3 = \sqrt{2}x$
2.	Write each of the following as an equation in two variables x and y and write in standard form. a) $x = -3$ b) $y = 4$ c) $3x = 2$ d) $7y = 3$
3.	Let ax+by+c=0, where a,b, and c are real numbers such that $a \neq 0 \; and \; b \neq 0.$ Then any pair of values of x and y which satisfies the equation ax+by+c=0 is called _____ of it.
4.	Show that $x = 1, y = 1$ as well as $x = 2, y = 5$ is a solution of $4x - y - 3 = 0$.
5.	Check which of the following are solutions of the equation $x - 2y = 4$ and which are not: a) (0,-2) b) (2,0) c) (4,0) d) $(\sqrt{2}, 4\sqrt{2})$ d) (1,1)
6.	If $x = 2k - 1 \; and \; y = k$ is a solution of the equation 3x-5y-7=0 , find the value of k.
7.	If $x = k^2 \; and \; y = k$ is a solution of the equation $x - 5y + 6 = 0$, find the values of k.
8.	Write two solutions of the equations: a) $3x + 4y = 7$

	b) $x = 6y$ c) $\frac{2}{3}x - y = 4$
9.	Write two solutions of the form $x = 0, y = a$ and $x = b, y = 0$ for the equations: a) $5x - 2y = 10$ b) $-4x + 3y = 12$
10.	If $x = 2p + 1\ and\ y = p - 1$ is a solution of the equation $2x - 3y + 5 = 0$, find the value of p.
11.	Equation of x axis is _____.
12.	Equation of Y-axis is _____.
13.	Linear equation in two variables have _____solutions.
14.	Every point on the graph of a linear equation in two variables is a _____of the linear equation.
15.	Every solution of the linear equation is a _____on the graph of the linear equation.
16.	The graph of a linear equation in two variables is a _____.
	INTRODUCTION TO EUCLID'S GEOMETRY
17.	What is the difference between Axioms and Postulates?
18.	What is Euclid's fifth postulate?
19.	What is the difference between Axioms and Theorems?
20.	What is the least number of distinct points which determine a unique line?
21.	In how many maximum number of points can two distinct lines intersect?
22.	What are the three basic concepts of geometry?
23.	What is the difference between intersecting lines and concurrent lines?
24.	Define the "point" as given by Euclid.
25.	Define a "line" as given by Euclid.
26.	Write any five of Euclid's axioms.
27.	Write Eculid's five postulates.