Robots & Math
Teacher Name

Name: _____
Date: _____ Per: __

Group Quiz 1

Show ALL work and box final answers.

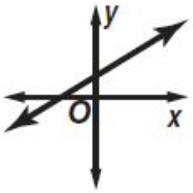
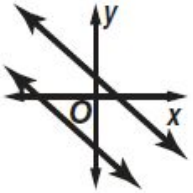
1a.) If a LinkBot's wheels are turning at a speed of 200 degrees per second for 10 seconds, how far will it travel (in inches)?

1b.) If a LinkBot's wheels are turning at a speed of 450 degrees per second for 8 seconds, how far will it travel (in inches)?

2a.) Suppose we need our Linkbot to travel exactly 70 inches in exactly 14 seconds. What speed will the robot have to travel in degrees per second to achieve this?

2b.) Suppose we need our Linkbot to travel exactly 55 inches in exactly 15 seconds. What speed will the robot have to travel in degrees per second to achieve this?

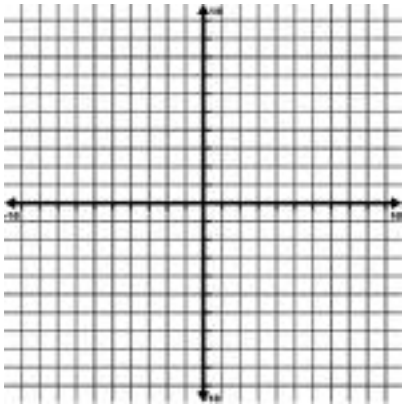
3.) How many solutions are shown in each graph below?

intersecting lines	same line	parallel lines
		

a.) _____ b.) _____ c.) _____

4.) Solve the following system of linear equations by graphing. ***State the number of solutions. If a solution does exists, indicate what it is.***

$y = 2x + 1$
$y = x - 4$



number of solutions: _____

solution (if any): _____

5.) Solve using substitution.

$y = 4x - 8$
$y = 2x + 2$