Robots	&	Mat	h
Teache	r١	Jam	۹

Name: _	
Date:	Per·

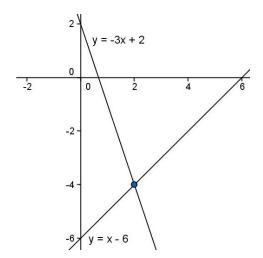
Group Quiz 2

Show ALL work and box final answers.

1) A tire with a 3.5 inch diameter rotates 650 degrees. How far has the tire traveled?

2) You have a linkbot wheel with a 12 inch circumference that must travel 19 inches. How many degrees do the wheels need to be programmed to spin?

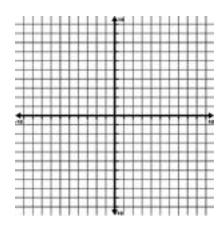
3) The following graph shows a linear system. Does the system have one solution, no solutions, or infinitely many solutions? If it has a solution, name it.



4) Solve the following system by graphing.

$$y = -4x + 8$$

$$y = 3x + 1$$



Solution:

5) Solve the following systems using substitution.

a)
$$y = 7x - 3$$

$$y = -x + 13$$

b)
$$y = -6x - 3$$

$$-8x + 8y = 88$$

6) Solve the following systems using elimination.

a)
$$4x + 8y = 20$$

$$-4x + 2y = -30$$

b)
$$7x + 2y = 24$$

$$8x + 2y = 30$$

c)
$$-4x + 9y = 9$$

$$x - 3y = -6$$