Chapter 3 - Linear Equations and Functions

Objective: To Review for Functions TEST

AGENDA

1) Take HW out to be checked
2) DO NOW
3) HW Questions
   - in groups
   - on board
4) 3 problems- 3 methods
5) Inequalities and Functions Review

HW: STUDY for Functions TEST

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Chapter 3 - Linear Equations and Functions

Objective: To Review for Functions TEST

Compare & Contrast Activity

Instruction: Please read each scenario and choose the most efficient method to solve each one.
1) Graphing Method
2) Substitution Method
3) Elimination Method.

On your 2x2 grid, show your work for each of the methods in the appropriate box.
Then, explain which of the methods was the most efficient for your scenario. Explain *why* you believe it was the best method to use.

Scenario 1: Margie is responsible for buying a week's supply of food and medication for the dogs and cats at a local shelter. The food and medication for each cat costs **twice** as much as those supplies for a dog. She needs to feed 12 cats and 24 dogs. Her budget is $144. How much can Margie spend on each dog for food and medication?

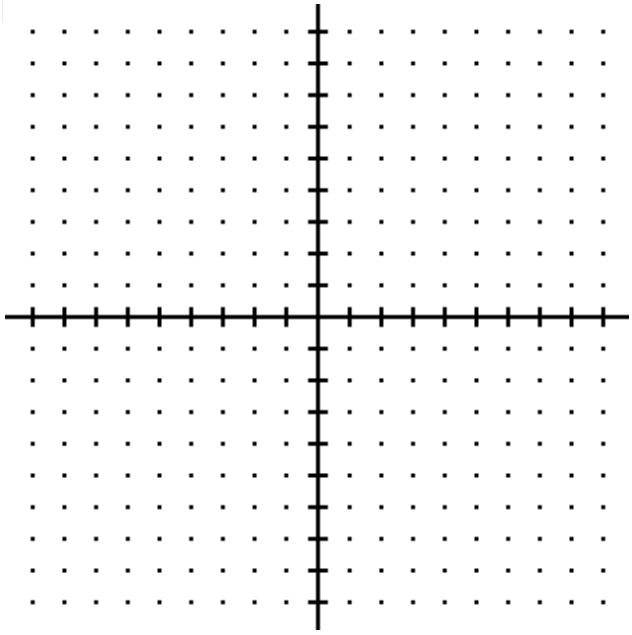
Let c = cost per cat $\quad 12c + 24d = 144$
d = cost per dog $\quad c = 2d$

Scenario 2: The equation $5x + 2y = 48$ and $3x + 2y = 32$ represent the money collected from school concert tickets sales during two class periods. If x represents the cost for each adult ticket and y represents the cost for each student ticket, what is the cost for each adult ticket?

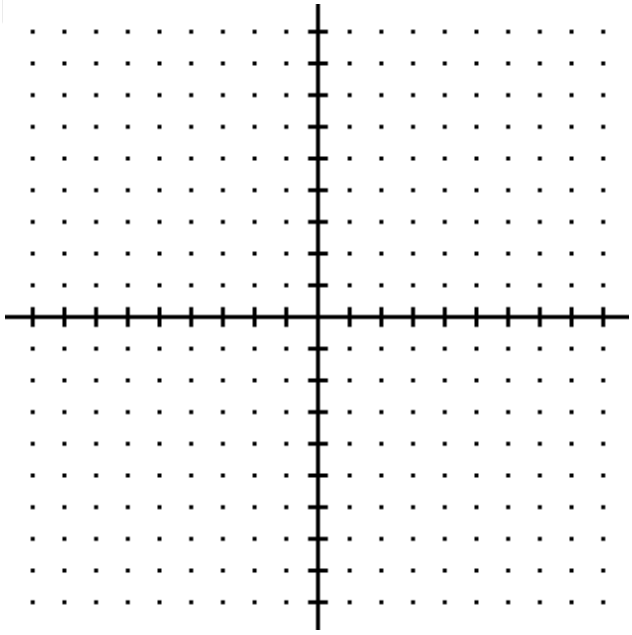
Scenario 3: Reina went to play miniature golf on Monday, when it cost $15 to rent the club and ball, plus $1 per game. Farah went Thursday, paying $2 per game, plus rental fees of $10. By coincidence, they played the same number of games for the same total cost. How many games did each one play?

Let x = games $\quad y = x + 15$
y = dollars $\quad y = 2x + 10$

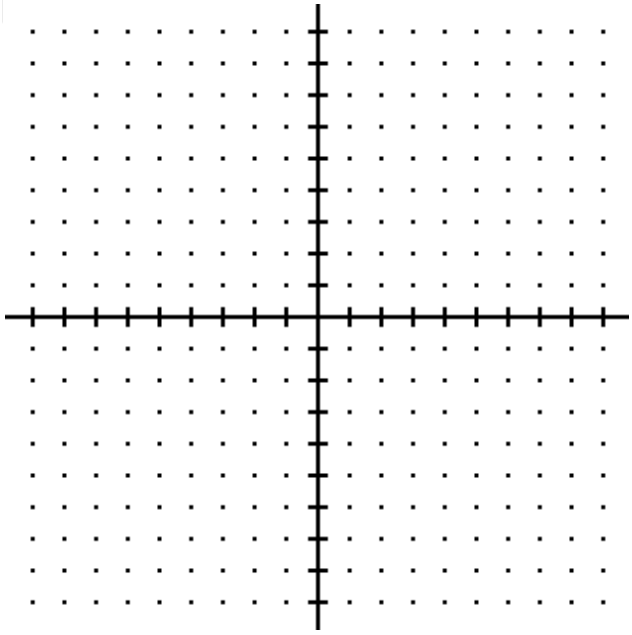
Equations: _____ **and** _____

Graphing Method	**Substitution Method**
	
Elimination Method	**Which was best? Why?**

Equations: _____ **and** _____

Graphing Method	**Substitution Method**
	
Elimination Method	**Which was best? Why?**

Equations: _____ **and** _____

Graphing Method	**Substitution Method**
	
Elimination Method	**Which was best? Why?**

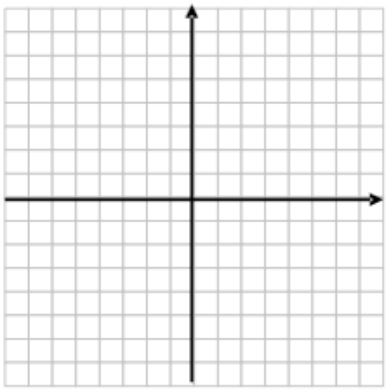
Name: _____ Date: _____

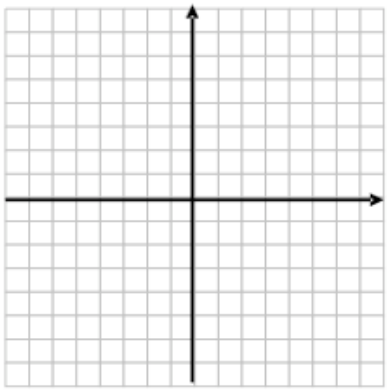
Graph the following inequalities and systems of inequalities.

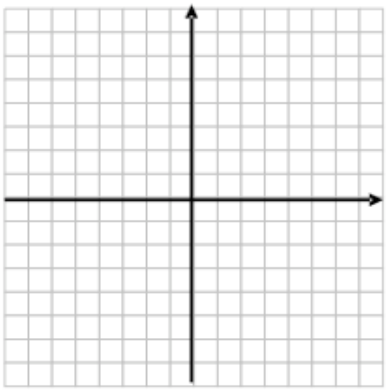
1. $x + 3y \geq 3$

2. $x - y \geq 0$

3. $y \geq -5x + 3$
   $y > -2$



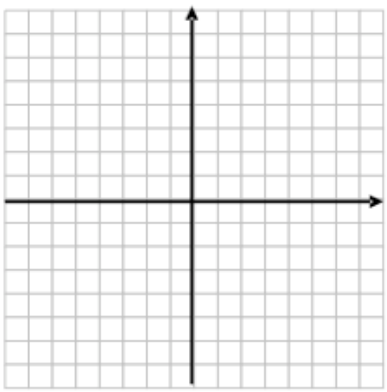


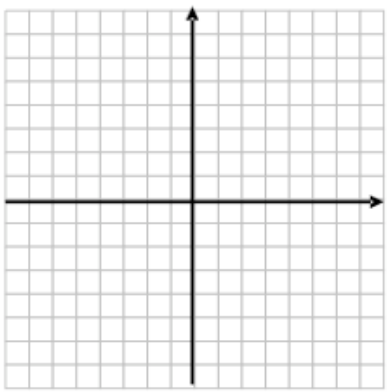


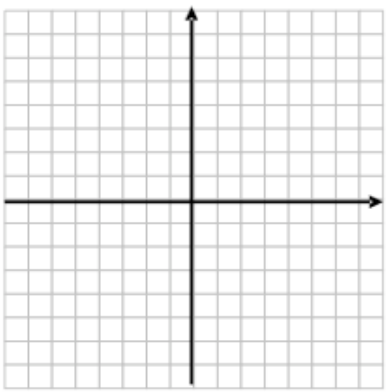
4. $y \geq x - 3$
   $y \geq -x - 1$

5. $-4 + 2y < 2x$
   $2y - 2x \geq -6$
   $y > 3$

6. $y \geq 0$
   $2x + y > 1$
   $x < 5$







Name: _____ Date: _____

FUNCTIONS

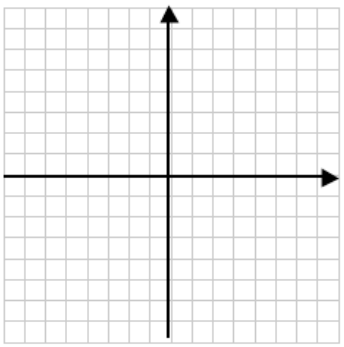
For each function, find the indicated values.

SAMPLE: $h(x) = x - 1$ a. $h(0) = 0 - 1 = -1$; b. $h(2) = 2 - 1 = 1$

1. $f(x) = -3x + 2$

a. $f(0) =$ _____ b. $f(-2) =$ _____ c. $f(\frac{2}{3}) =$ _____

d. Sketch a graph of f in the space provided:



e. Name the 3 points on the graph that correspond with (a) through (c) above.

(,) (,) (,)

2. $g(x) = x^2 - 1$

a. $g(5) =$ _____ b. $g(-5) =$ _____ c. $g(\frac{3}{2}) =$ _____

3. $t(x) = x - x^2$

a. $t(0) =$ _____ b. $t(-3) =$ _____ c. $t(3) =$ _____

4. $j(x) = 0.24x + 11$ (Use a calculator)

a. $j(3) =$ _____ b. $j(-2) =$ _____ c. $j(8.5) =$ _____

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