Teacher

NAME_____**Test Grade:** _____ **Deadline:** **Wed, Jan 31**

RETEST REVIEW: SYSTEMS OF EQUATIONS

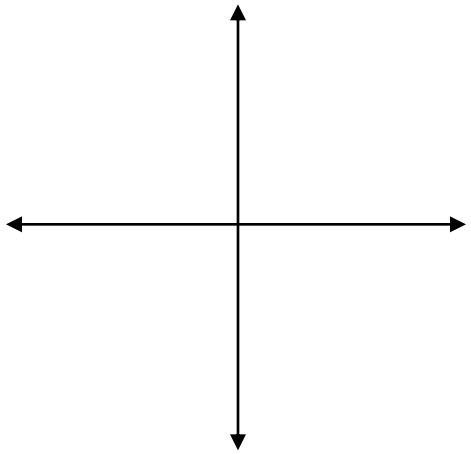
Solve each system by the method specified.

1) Solve by graphing in the calculator. Sketch the graph.

$y = -\frac{1}{2}x + 2$
$3x + 4y = 12$

y1 = _____

y2 = _____



Solution:_____

2) Solve by graphing in the calculator. Sketch the graph.

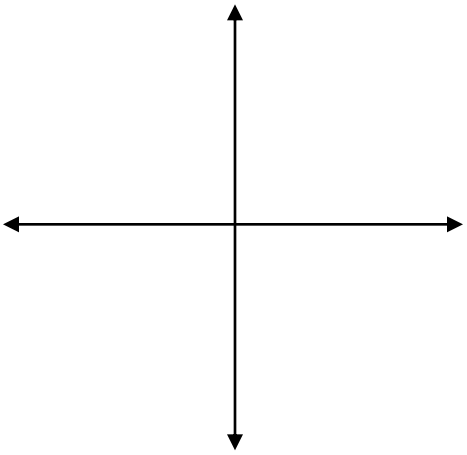
Line 1: y = 3x + 4

y1 = _____

Line 2:

x	y
-2	-11
-1	-8
2	1
3	4

y2 = _____



Solution:_____

3) Solve using a matrix.

2x + 5y = 17

6x – 5y = -9

Solution:_____

4) Solve using a matrix.

8x – 6y = 12

4x – 3y = 6

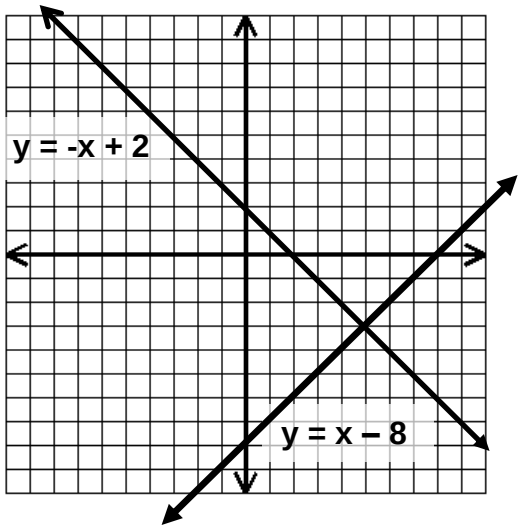
Solution:_____

5) If (x, -3) is a solution for the following system of equations, what is the value of x?

$$4x - y = 15$$
$$3x + y = 6$$

x = _____

6) Which ordered pair is the solution of the system graphed below?



A. (2, 0)

B. (8, 0)

C. (-3, 5)

D. (5, -3)

For each word problem, set up a system of equations, and solve for the value(s) indicated.

7) If 8 pens and 7 pencils cost $3.37 while 5 pens and 11 pencils cost $3.10, how much does each pen and pencil cost?

Equations:_____

_____

Solution:_____

8) A restaurant sold a total of 418 hamburgers during one day. Total hamburger sales were $1077. Large hamburgers sold for $3, and small hamburgers sold for $1.50. How many large hamburgers were sold?

Equations:_____

_____

Solution:_____

_____ 9) Holt bought a large pizza and a liter of drink for $11, not including tax. The price of the pizza is 5 more than 3 times the price of the drink. Which system of equations can be used to find p, the price of the pizza and d, the price of the drink?

A. $p + d = 11$
$p = 3d + 5$

B. $p + d = 11$
$d = 3p + 5$

C. $3p + 5d = 11$
$p = 3d + 5$

D. $3p + 5d = 11$
$d = 3p + 5$

Answers in random order:

A	3	$0.15	Infinitely many	No solution
D	$0.29	(4, 0)	(1, 3)	300