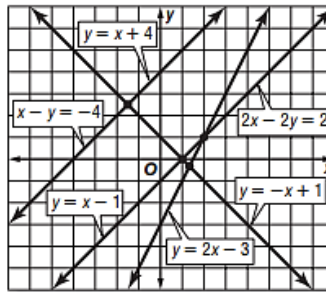Name: _____ Date: _____ Period: _____

Algebra 1CP Unit 5 practice test Show your work where needed and write your answer in the space provided

Use the graph at the right to determine whether each system has *no solution*, *one* solution, or *infinitely many* solutions.

1. $y = x - 1$
   $y = -x + 1$

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

3. $y = x + 4$
   $2x - 2y = 2$

4. $y = 2x - 3$
   $2x - 2y = 2$

1)_____

2) _____

3)_____

4)_____

5)_____

6)_____

7)_____

8)_____

9)_____

10)_____

Solve the following system of equations by graphing

$x + 2y = 4$
$y = -\dfrac{1}{2}x + 2$

5)
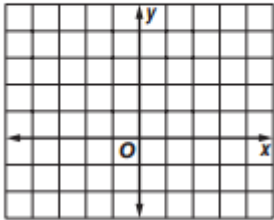
Solve the following systems of equation by substitution

6) $x = -4y$
   $3x + 2y = 20$

7) $y = 5x - 8$
   $4x + 3y = 33$

8) $y = 4x - 1$
   $y = 2x - 5$

Solve the following systems of equation by elimination

9) $5x + 2y = -3$
   $3x + 3y = 9$

10) $2x - 3y = 9$
    $-5x - 3y = 30$

_____11)

$x - y = 1$
$x + y = 3$

_____ 12)

$2x + 8y = 6$
$-5x - 20y = -15$

Solve the following problems using the charts below

13) Anya makes 14 baskets during her game. Some of these baskets were worth 2-points and others were worth 3-points. In total, she scored 30 points. Write and solve a system of equations to find how 2-points baskets she made.

Define variables:

System of equations :

State your solution:

Solve the system, showing all steps:

Elimination   Substitution   Graphing

14) A Pizza restaurant offers the following deals: Deal #1: $8.99 for one large pizza and $5 for each additional large pizza on the same order. Deal#2: $5.99 per large pizza. At what point are both deals equal?

Define variables:

System of equations :

State your solution:

Solve the system, showing all steps:

Elimination   Substitution   Graphing

Extra credit: When is each deal above a better deal? Show your work and explain.