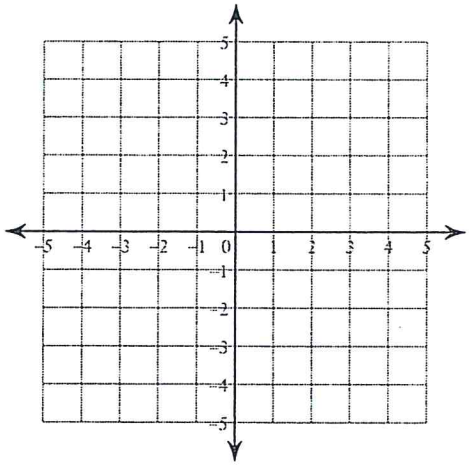
Name_____

Systems of Two Equations DAY SIX

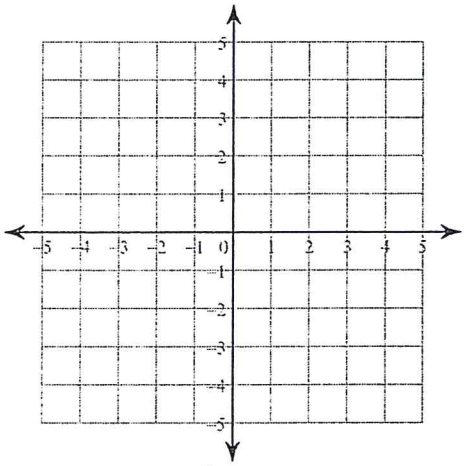
Date_____ Period____

Solve each system by graphing.

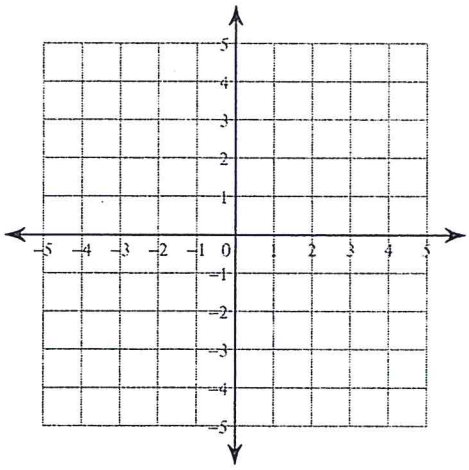
1) $y = -3x + 4$
$y = 3x - 2$



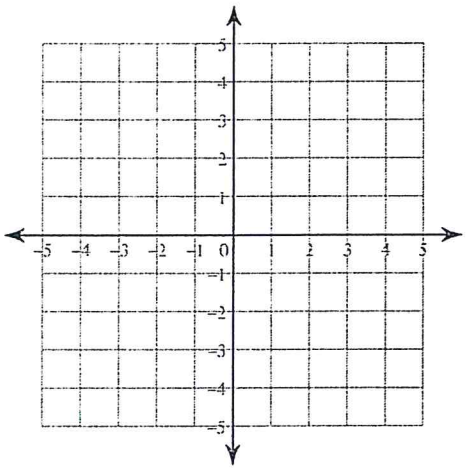
2) $y = x + 2$
$x = -3$



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



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



Solve each system by substitution.

5) $y = 4x - 9$
$y = x - 3$

6) $4x + 2y = 10$
$x - y = 13$
$+y \quad +y$
$x = 13 + y$
$* \boxed{(6, -7)}$

$4(13+y) + 2y = 10$
$52 + 4y + 2y = 10$
$52 + 6y = 10$
$-52 \quad -52$
$\frac{6y}{6} = \frac{-42}{6}$
$\boxed{y = -7}$
$x - (-7) = 13$
$x + 7 = 13$
$-7 \quad -7$
$\boxed{x = 6}$

7) $y = -5$
$5x + 4y = -20$

8) $x + 7y = 0$
$2x - 8y = 22$

DAY SEVEN
9 – 12
and
15 – 18

9) $6x + 8y = -22$
$y = -5$

10) $-7x + 2y = 18$
$6x + 6y = 0$

11) $7x + 2y = -19$
$-x + 2y = 21$

12) $3x - 5y = 17$
$y = -7$

Solve each system by elimination.

15) $(8x - 6y = -20)\,2$
$-16x + 7y = 30$

$16x - 12y = -40$
$-16x + 7y = 30$

$\frac{5y}{5} = \frac{-10}{5}$

$\boxed{y = -2}$

$x =$ _____

16) $6x - 12y = 24$
$-x - 6y = 4$

17) $-8x - 10y = 24$
$6x + 5y = 2$

18) $-24 - 8x = 12y$
$1 + \frac{5}{9}y = -\frac{7}{18}x$

Critical thinking questions: BONUS

25) Write a system of equations with the solution $(4, -3)$.

Kuta Software - Infinite Algebra 2

Name_____

Solving Quadratic Equations

Date_____ Period____

DAY EIGHT

Solve each equation by factoring.

Find the zeros.

1) $(3n-2)(4n+1)=0$

2) $m(m-3)=0$

3) $(5n-1)(n+1)=0$

4) $(n+2)(2n+5)=0$

5) $3k^2+72=33k$

6) $n^2=-18-9n$

7) $7v^2-42=-35v$

8) $k^2=-4k-4$

9) $-2v^2-v+12=-3v^2+6v$

10) $-4n^2+6n-16=-5n^2$

Name_____

Using the Quadratic Formula DAY NINE

Date_____ Period____

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Solve each equation with the quadratic formula.

1) $v^2 + 2v - 8 = 0$

2) $k^2 + 5k - 6 = 0$

3) $2v^2 - 5v + 3 = 0$

4) $2a^2 - a - 13 = 2$

5) $2n^2 - n - 4 = 2$

6) $b^2 - 4b - 14 = -2$

7) $8n^2 - 4n = 18$

8) $8a^2 + 6a = -5$

DAY TEN

9) $10x^2 + 9 = x$

10) $n^2 = 9n - 20$

11) $3a^2 = 6a - 3$

12) $x^2 = -3x + 40$

13) $9x^2 - 11 = 6x$

14) $4a^2 - 8 = a$

15) $14m^2 + 1 = 6m^2 + 7m$

16) $4x^2 + 4x - 8 = 1$