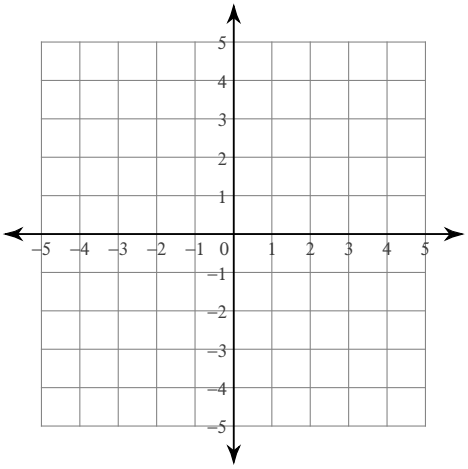
Name_____

Systems of Two Equations

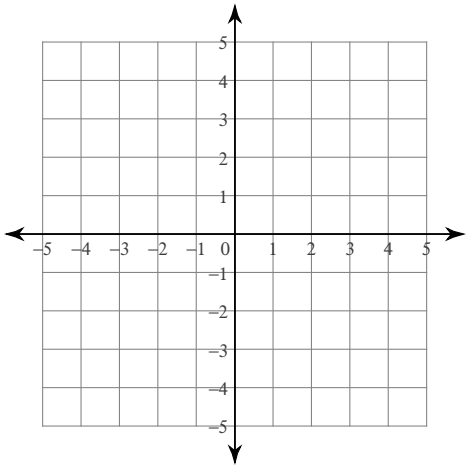
Date_____ Period____

Solve each system by graphing.

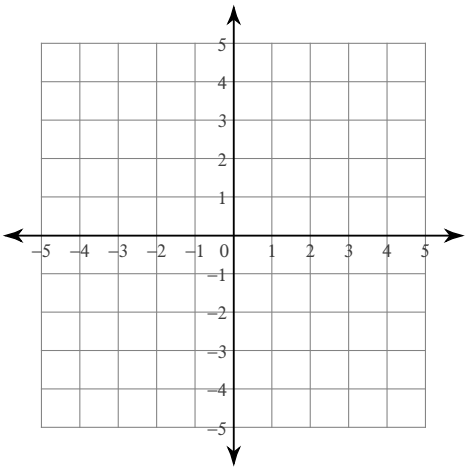
1) $y = -3x + 4$
$y = 3x - 2$



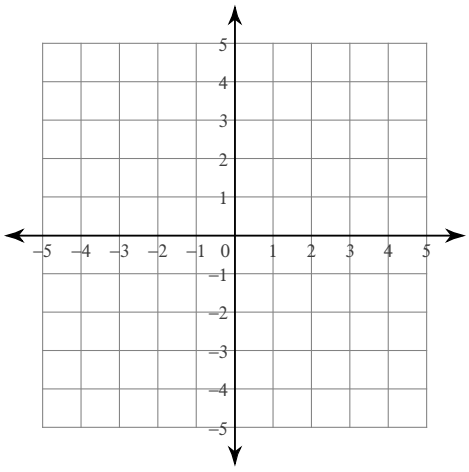
2) $y = x + 2$
$x = -3$



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) $4x + 2y = 10$
$x - y = 13$

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

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

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

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

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

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

13) $-7x + 4y = 24$
$4x - 4y = 0$

14) $4x - y = 20$
$-2x - 2y = 10$

Solve each system by elimination.

15) $8x - 6y = -20$
$-16x + 7y = 30$

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

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

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

19) $-4y - 11x = 36$
$20 = -10x - 10y$

20) $-9 + 5y = -4x$
$-11x = -20 + 9y$

21) $0 = -2y + 10 - 6x$
$14 - 22y = 18x$

22) $-16y = 22 + 6x$
$-11y - 4x = 15$

23) $-16 + 20x - 8y = 0$
$36 = -18y - 22x$

24) $-\frac{5}{7} - \frac{11}{7}x = -y$
$2y = 7 + 5x$

Critical thinking questions:

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

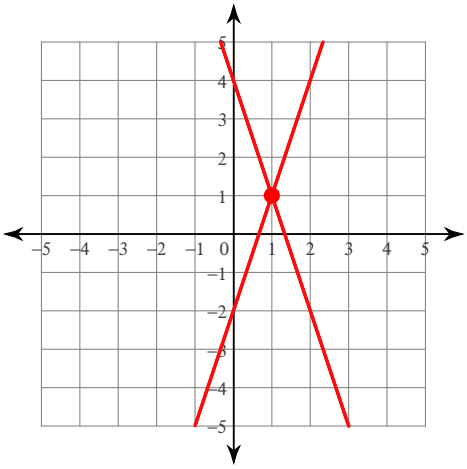
Kuta Software - Infinite Algebra 2 Name_____

Systems of Two Equations

Date_____ Period____

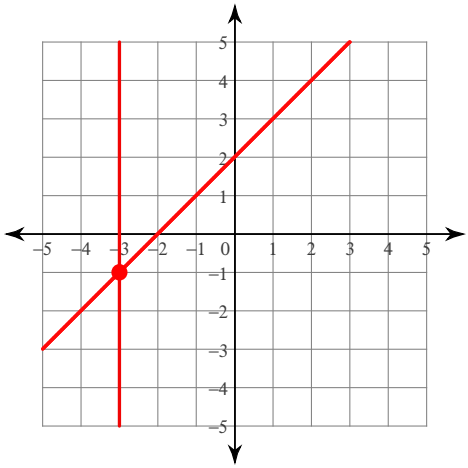
Solve each system by graphing.

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



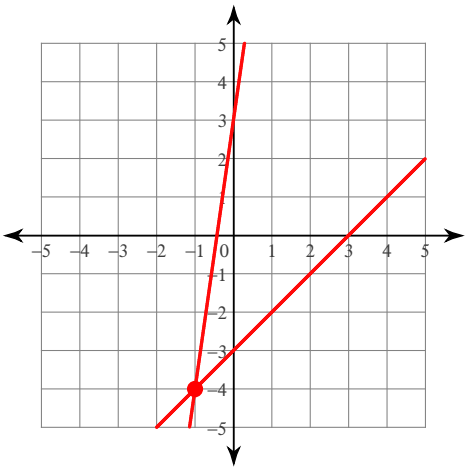
(1, 1)

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



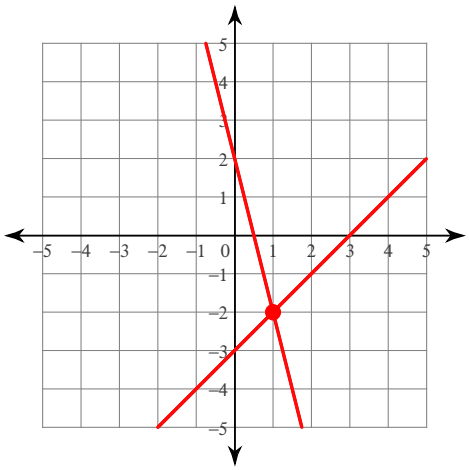
(–3, –1)

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



(–1, –4)

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



(1, –2)

Solve each system by substitution.

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

(2, –1)

6) $4x + 2y = 10$
$x - y = 13$

(6, –7)

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

(0, –5)

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

(7, –1)

9) $6x + 8y = -22$
$y = -5$
$(3, -5)$

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

11) $7x + 2y = -19$
$-x + 2y = 21$
$(-5, 8)$

12) $3x - 5y = 17$
$y = -7$
$(-6, -7)$

13) $-7x + 4y = 24$
$4x - 4y = 0$
$(-8, -8)$

14) $4x - y = 20$
$-2x - 2y = 10$
$(3, -8)$

Solve each system by elimination.

15) $8x - 6y = -20$
$-16x + 7y = 30$
$(-1, 2)$

16) $6x - 12y = 24$
$-x - 6y = 4$
$(2, -1)$

17) $-8x - 10y = 24$
$6x + 5y = 2$
$(7, -8)$

18) $-24 - 8x = 12y$
$1 + \frac{5}{9}y = -\frac{7}{18}x$
$(6, -6)$

19) $-4y - 11x = 36$
$20 = -10x - 10y$
$(-4, 2)$

20) $-9 + 5y = -4x$
$-11x = -20 + 9y$
$(1, 1)$

21) $0 = -2y + 10 - 6x$
$14 - 22y = 18x$
$(2, -1)$

22) $-16y = 22 + 6x$
$-11y - 4x = 15$
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$36 = -18y - 22x$
$(0, -2)$

24) $-\frac{5}{7} - \frac{11}{7}x = -y$
$2y = 7 + 5x$
$(-3, -4)$

Critical thinking questions:

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

Many answers. Ex: $x + y = 1$, $2x + y = 5$

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