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) $4x + y = 2$
   $x - y = 3$
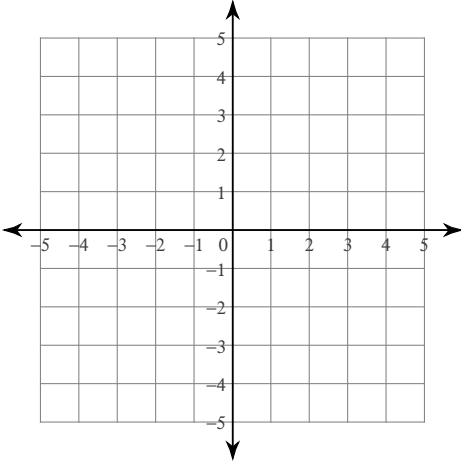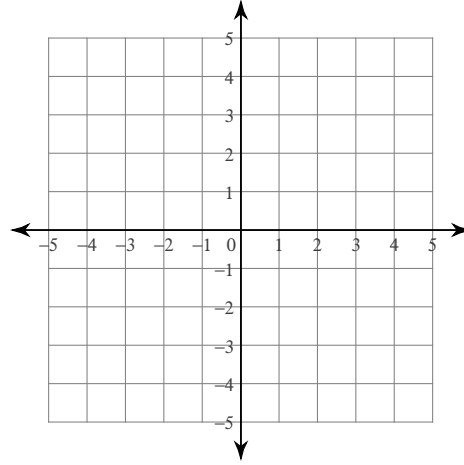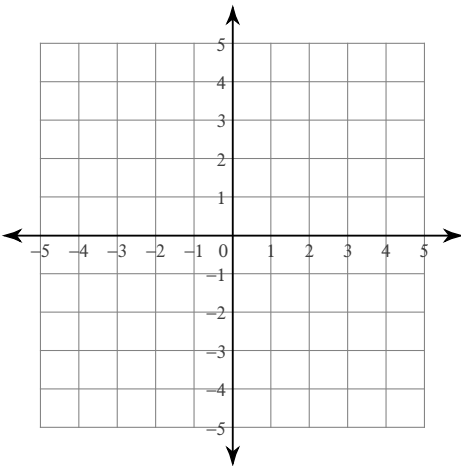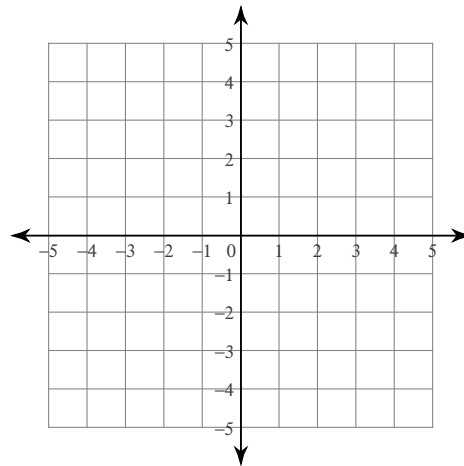
Solve each system by substitution.

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

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

Critical thinking questions:

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