Name_____

Systems of Two Equations

Date_____ Period____
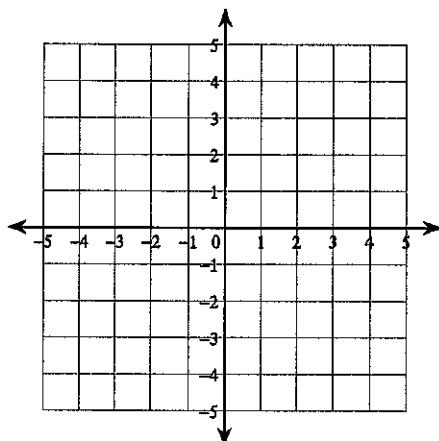
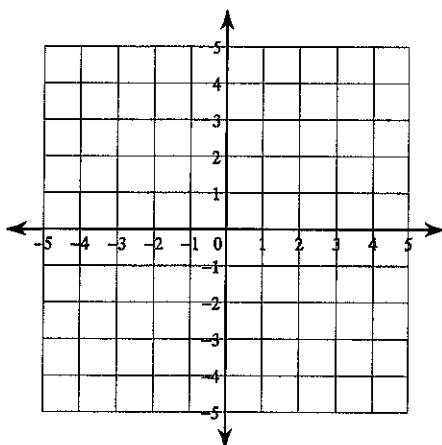**Solve each system by graphing.**
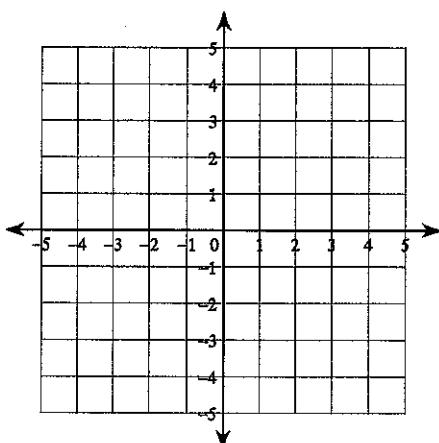
1) $y = -3x + 4$
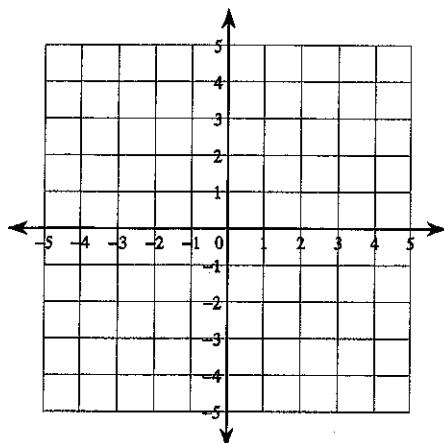 $y = 3x - 2$
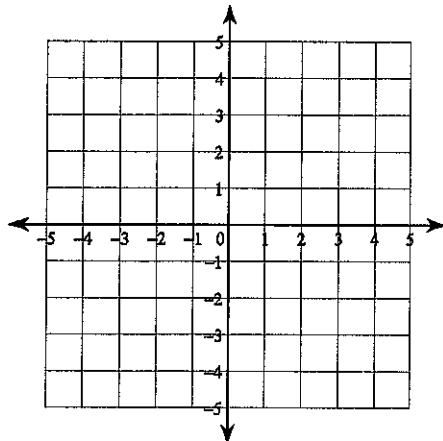
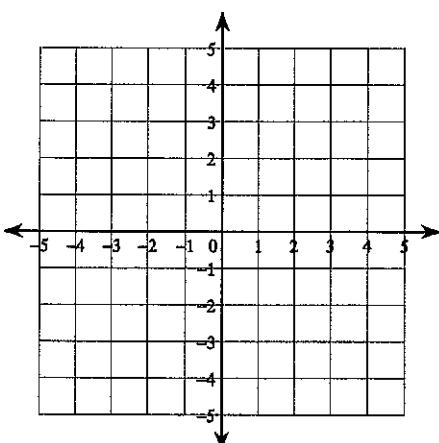2) $y = x + 2$
   $x = -3$

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

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

5) $8x + y = -4$
   $0 = -4 - y - 8x$

6) $2y + x + 4 = 0$
   $-x = -8 - 2y$

Solve each system by substitution.

7) $y = 4x - 9$
$\quad y = x - 3$

8) $4x + 2y = 10$
$\quad x - y = 13$

9) $y = -5$
$\quad 5x + 4y = -20$

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

11) $6x + 8y = -22$
$\quad y = -5$

12) $7x + 2y = -6$
$\quad -14x - 4y = -2$

13) $2x + 2y = -6$
$\quad 5x - 5y = -15$

14) $-x + 2y = -7$
$\quad -2x - 6y = -14$

Solve each system by elimination.

15) $-x - y = 8$
$\quad x - 3y = 8$

16) $-2x - 2y = 6$
$\quad 10x + 10y = -30$

17) $4x + 5y = -9$
$\quad 8x - y = -7$

18) $-2x + 3y = 15$
$\quad -6x + 6y = 18$

19) $2x + 18y = 22$
$\quad -x - 9y = -11$

20) $36 + 7x - 8y = 0$
$\quad -10y = -12 - 6x$

21) $-x + \dfrac{2}{5} = -\dfrac{3}{5}y$

$\quad 3y = -\dfrac{18}{11}x + \dfrac{51}{11}$

22) $-17 - 5y - 11x = 0$
$\quad -15 = 9x + 4y$

Critical thinking questions:

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