Worksheet   Name_____

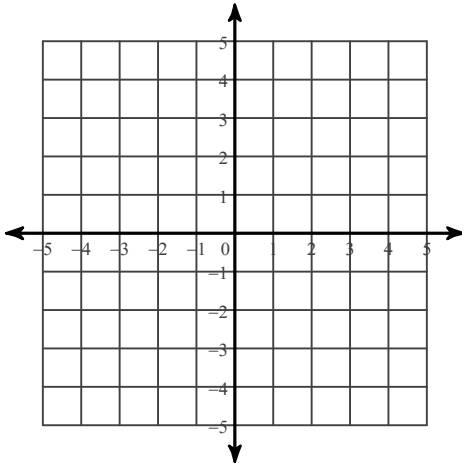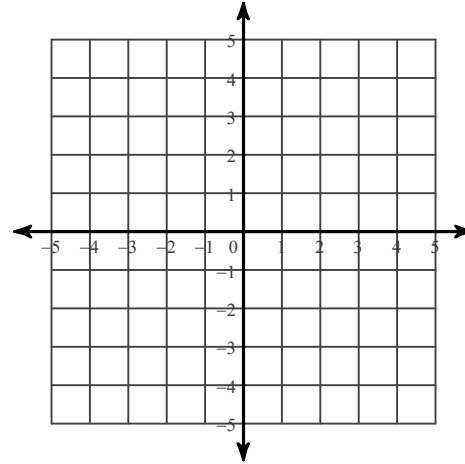# Solving Systems of Equations by Graphing   Date_____

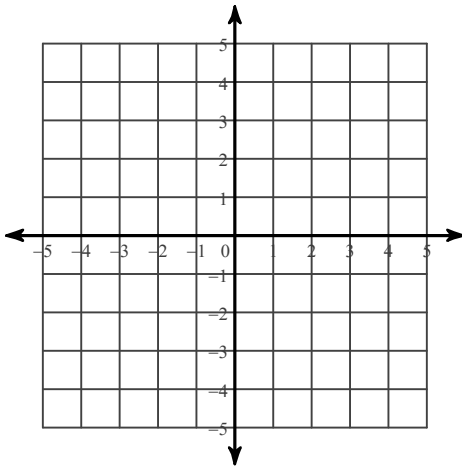**Solve each system by graphing (find the point of intersection of the two lines) .**

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

2) $y = -\dfrac{5}{3}x + 1$

   $y = -\dfrac{1}{3}x - 3$

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

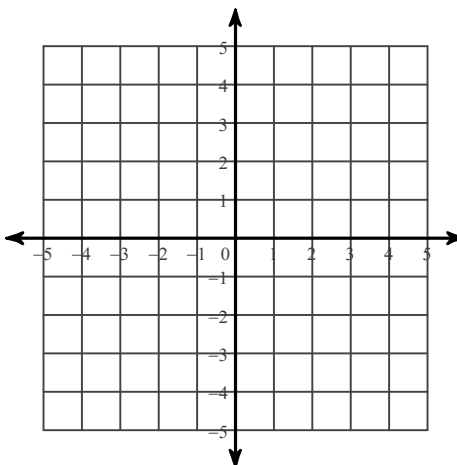4) $y = 4x + 1$
   $y = x - 2$

5) $y = -\dfrac{1}{3}x + 2$

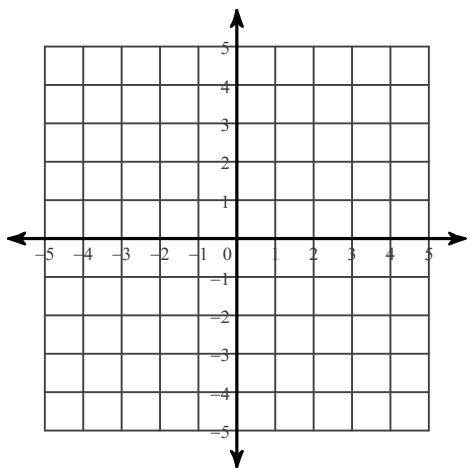 $y = -2x - 3$

6) $y = -\dfrac{1}{4}x + 3$
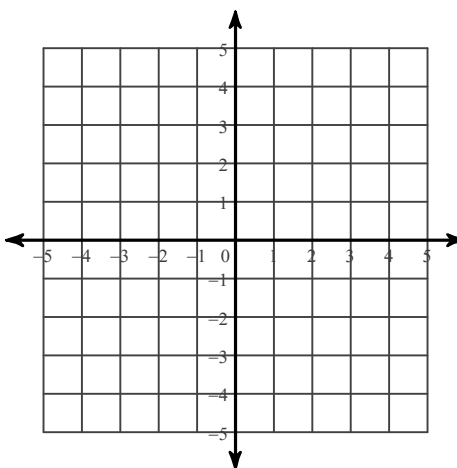
    $y = -\dfrac{3}{2}x - 2$

7) $y = \dfrac{4}{3}x - 3$
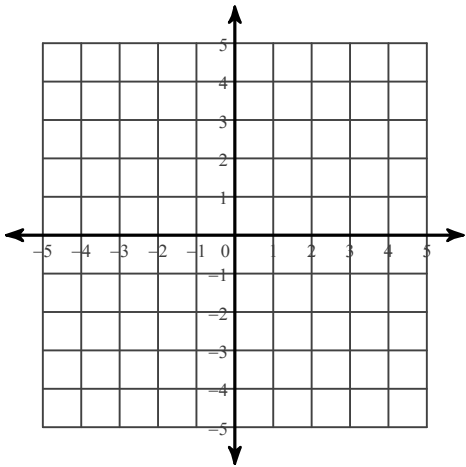
    $y = 1$
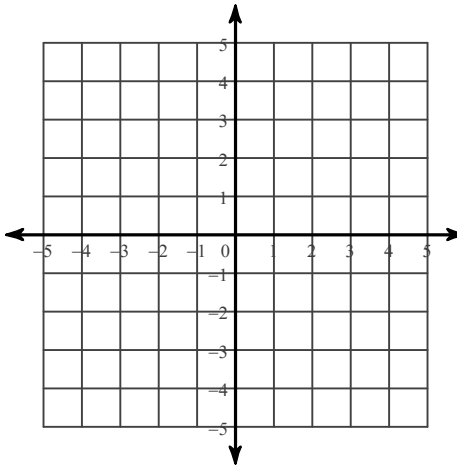
8) $y = -2x - 4$

    $y = 4x + 2$

9) $y = -\dfrac{3}{2}x + 4$
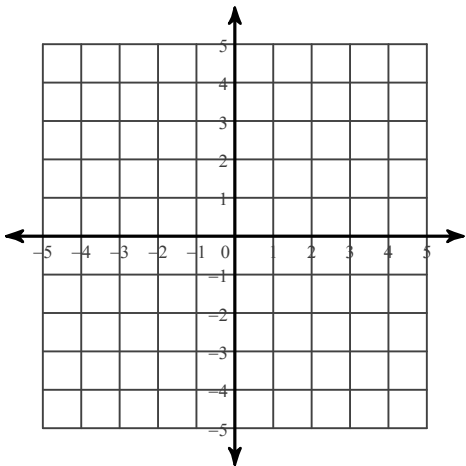
$y = \dfrac{3}{2}x - 2$
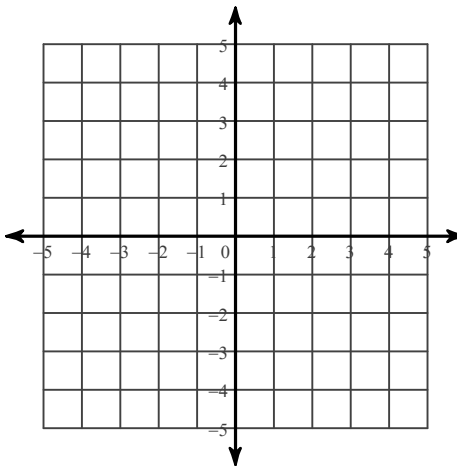
10) $y = 2x - 4$

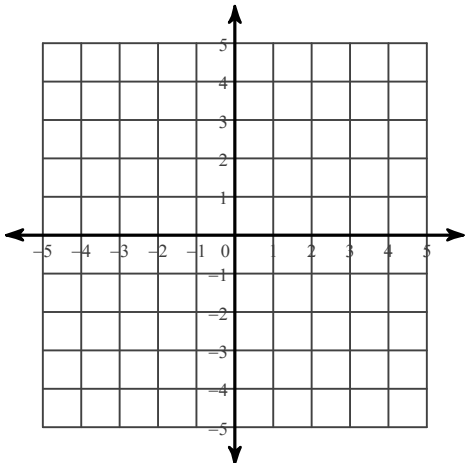$y = \dfrac{1}{4}x + 3$
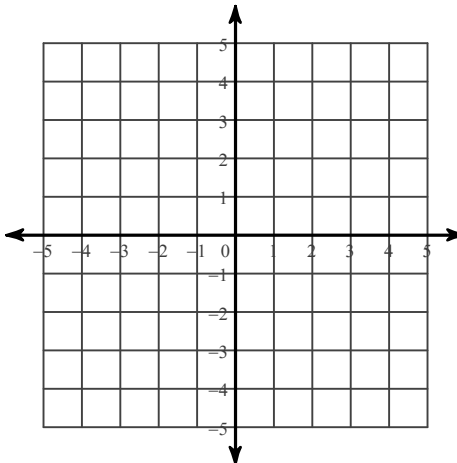
11) $5x + y = 4$

$x - y = 2$
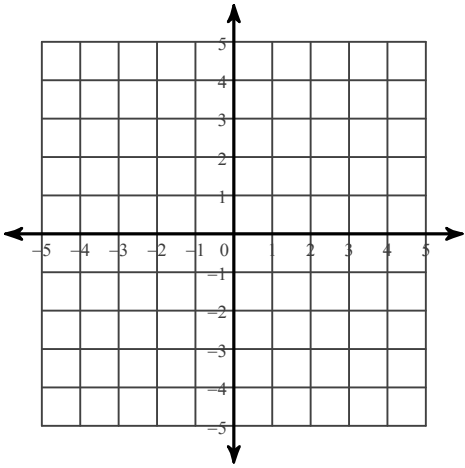
12) $x - 4y = -4$

$5x - 4y = 12$

13) $x + y = 3$

$8x + y = -4$

14) $x - y = 2$

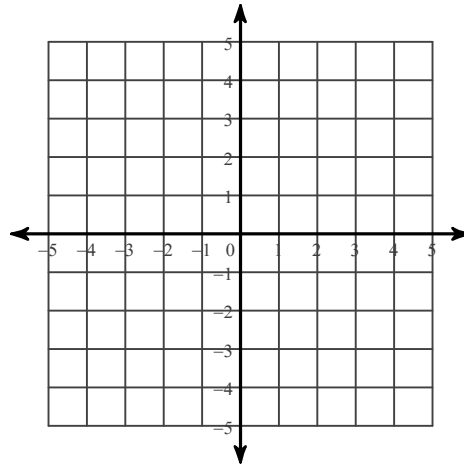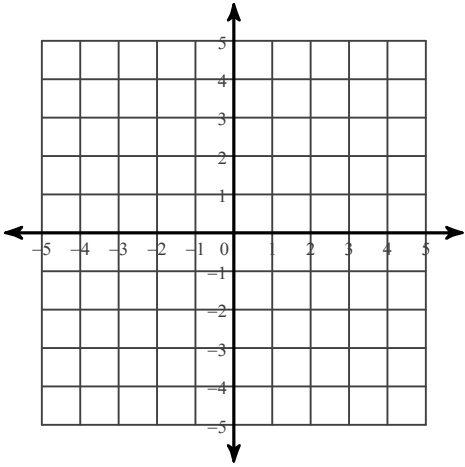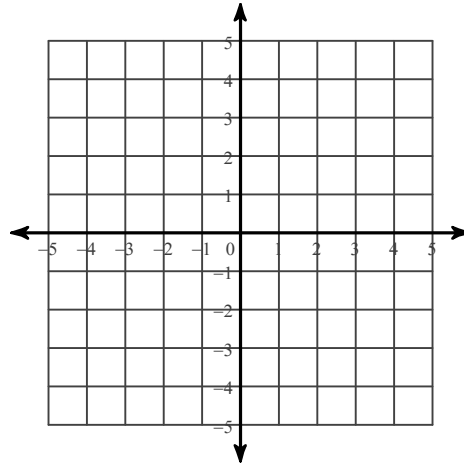$x = -2$

15) $2x + y = 1$
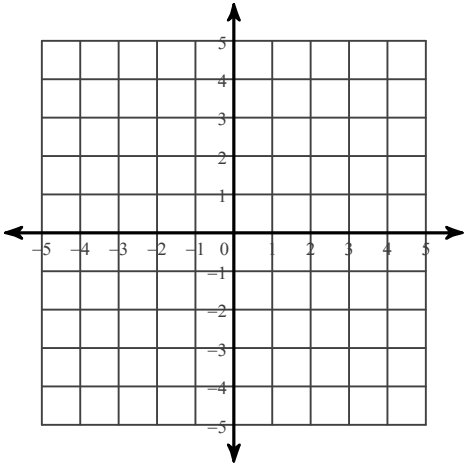$2x - y = 3$

16) $x - 3y = -6$
$2x - y = 3$

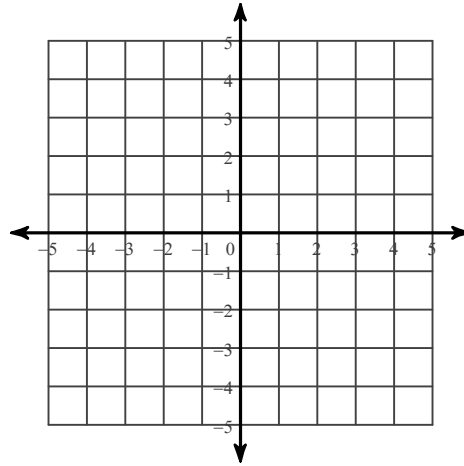17) $x + 3y = -12$
$5x - 3y = -6$

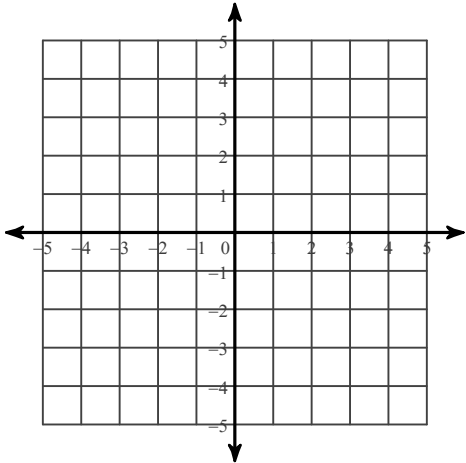18) $2x + y = -4$
$x + 4y = 12$

19) $x + 2y = 8$
$x - 2y = -4$

20) $2x + 3y = -12$
$5x - 3y = -9$

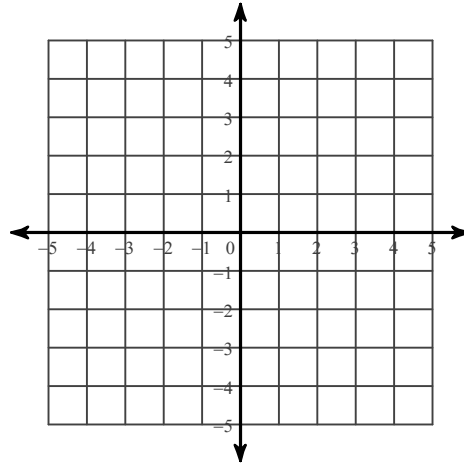**Solve each system by graphing (find the point of intersection of the two lines).**

21) $-6x + y = 4$
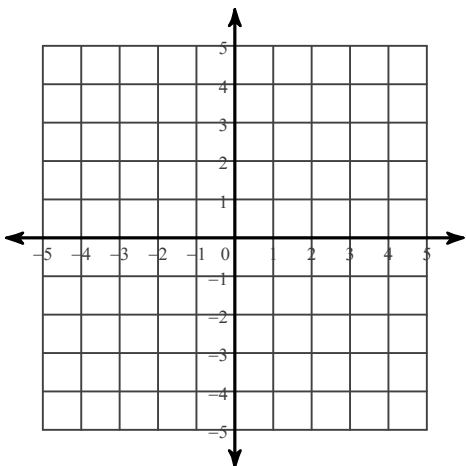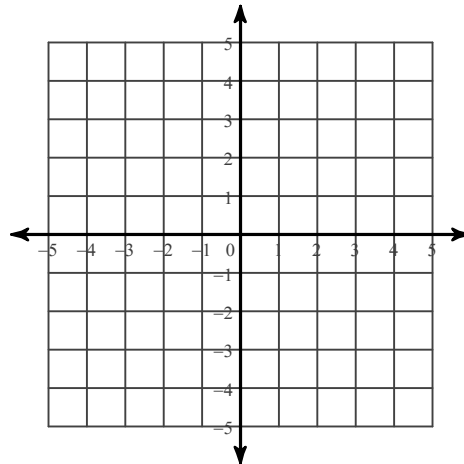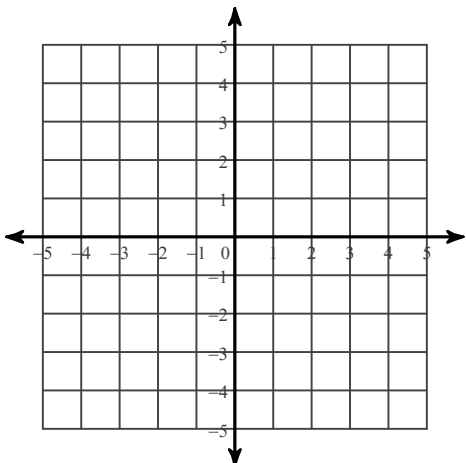$\quad -y - 2x = 4$

22) $-y - 3 + 4x = 0$
$\quad -4 = -3x - y$
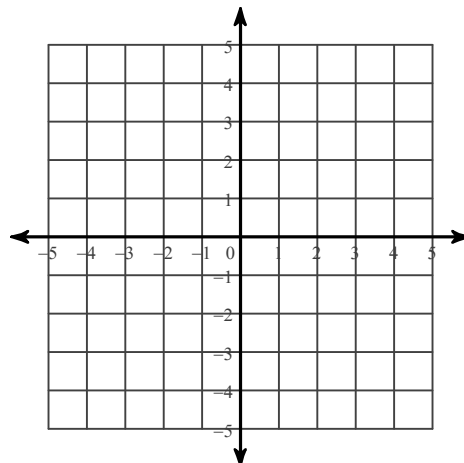
23) $0 = -3x - 4 - 2y$
$\quad 2 - \dfrac{1}{2}x = y$

24) $-2x - y = 1$
$\quad -6x = 3y + 3$

25) $x - 2y + 8 = 0$
$\quad -6 - 2y = -x$

26) $-2y - 5x = 2$
$\quad -5x = 2y - 4$

27) $2y + x - 4 = 0$
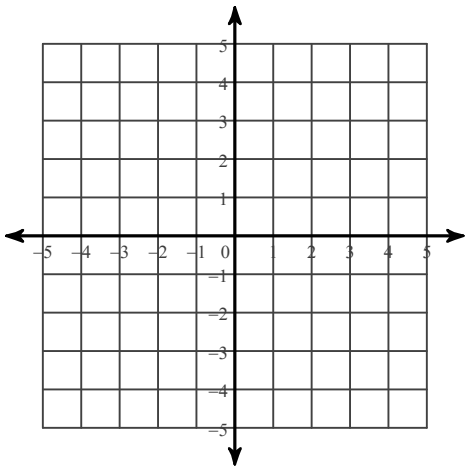
   $2y = -x + 4$

28) $-4 = -2y$

   $4 + 6x = -y$

29) $-2x = -8 - 2y$
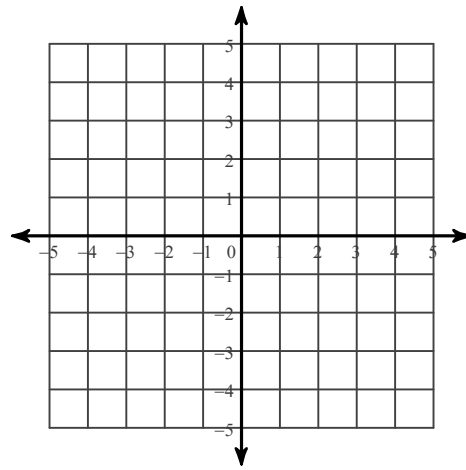
   $-2y - 8 = -2x$
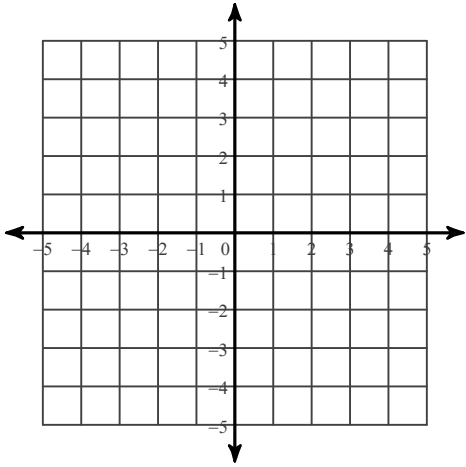
30) $2y + 4 + 3x = 0$

   $-2y = 8 + 3x$
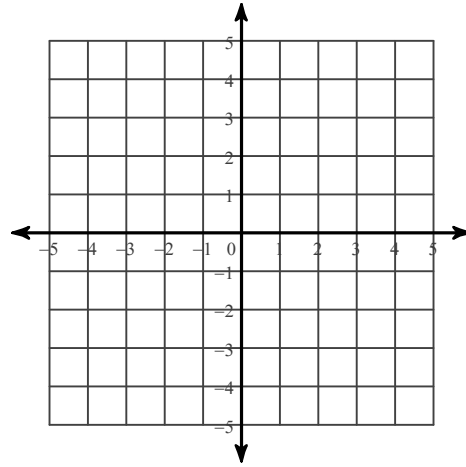
Answers to Solving Systems of Equations by Graphing

1) $(1, -1)$

2) $(3, -4)$

3) $(3, -2)$

4) $(-1, -3)$

5) $(-3, 3)$

6) $(-4, 4)$

7) $(3, 1)$

8) $(-1, -2)$

9) $(2, 1)$

10) $(4, 4)$

11) $(1, -1)$

12) $(4, 2)$

13) $(-1, 4)$

14) $(-2, -4)$

15) $(1, -1)$

16) $(3, 3)$

17) $(-3, -3)$

18) $(-4, 4)$

19) $(2, 3)$

20) $(-3, -2)$

21) $(-1, -2)$

22) $(1, 1)$

23) $(-4, 4)$

24) Infinite number of solutions

25) No solution

26) No solution

27) Infinite number of solutions

28) $(-1, 2)$

29) Infinite number of solutions

30) No solution