Unit 13.1 Introduction to Systems of Equations and Graphing Systems of Equations

1. Determine which set of ordered pairs (might be multiple or none) lie on both lines given below. Circle the answers the apply

    a. $x - y = 6$
    $2x + y = 0$
    Ordered Pairs: (1,-2)   (4,-2)   (2,-4)   (-1,2)   none

    b. $x + 3y = 5$
    $3y = 4 - x$
    Ordered Pairs: (2,1)   (2,-2)   (-1,2)   (4,0)   none

    c. $3x - 5y = 1$
    $6x - 10y = 4$
    Ordered Pairs: (3,7)   (1,-5)   (-1,4)   (0,0)   none

    d. $2x + 4y - 6 = 0$
    $3x + 6y - 9 = 0$
    Ordered Pairs: (1,1)   (2,0)   (0,3/2)   (-1,3)   none
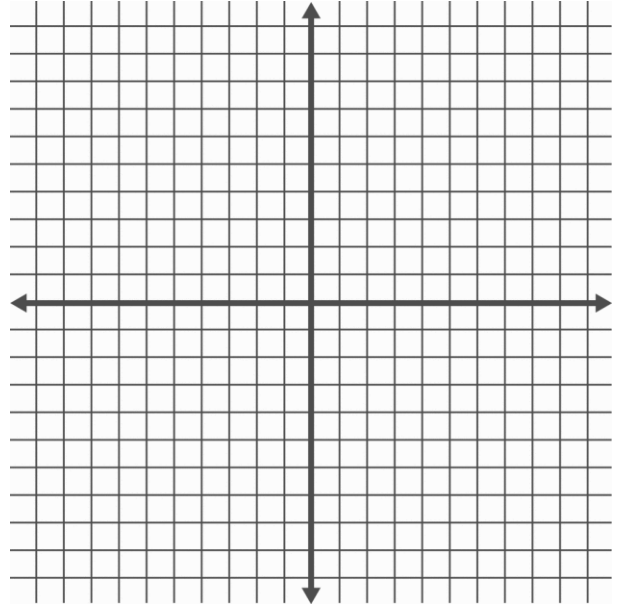
    e. $2x + y = 3$
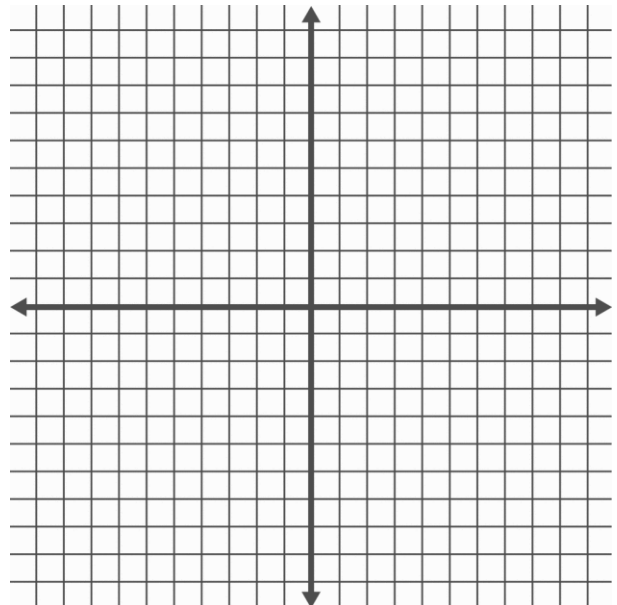 $4x + 2y = 5$
    Ordered Pairs: (6,2)   (4,0)   (1,-7/8)   (2,5)   none

2. Find the solution to the system of equations by graphing
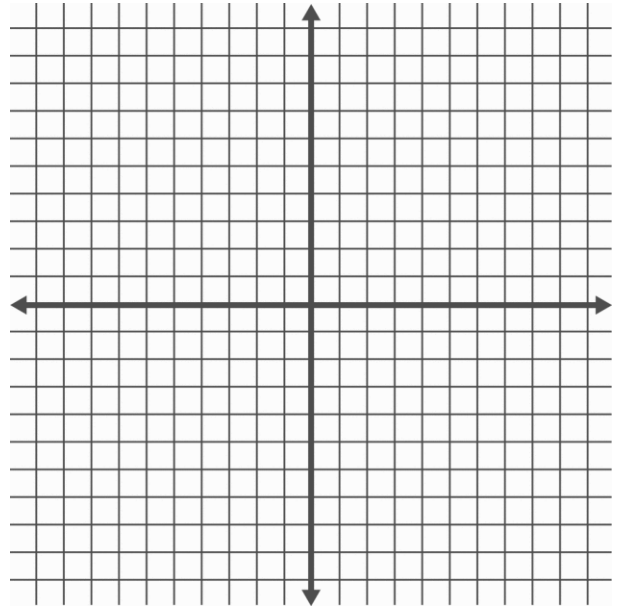   a. $2x - y = 4$
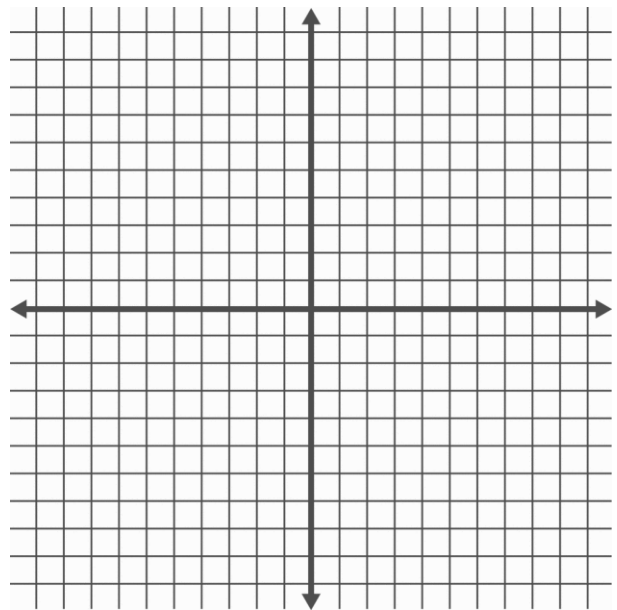 $3x + y = 6$

   b. $3x - y = 6$
      $y = 3x$

c. $5x = 5 + 4y$
   $-10x + 8y = -10$

d. $4x + 3y + 7 = 0$
   $5x - 2y + 3 = 0$

3. Solve the systems of equations by setting them equal to one another
    a.

        $y = 3x + 20$ x = _____

        $y = 7x$ y = _____

    b.

        $y = 4x + 25$ x = _____

        $y = 9x$ y = _____

    c.

        $y = 2x + 56$ x = _____

        $y = 9x$ y = _____