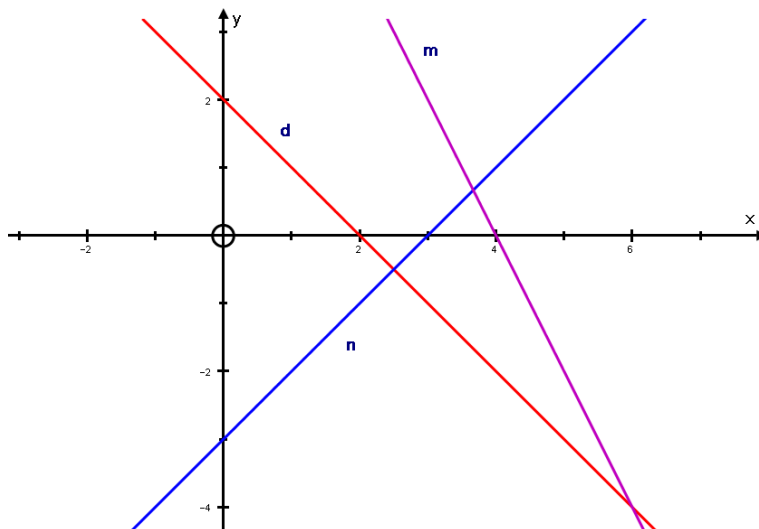**Name:** _____

Solving Linear Systems by Graphing

Exercise 1: Determine the solution of the system of equations represented by each pair of lines.

1) d and m
2) m and n
3) n and d

Exercise 2: Solve each system of equations by graphing.

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

2) $y + 3x - 3 = 0$
   $y - x - 1 = 0$

3) $x + y = 6$
   $x = 3$

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

5) $y = 3x - 9$
   $y = 2x - 5$

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

7) $y = 4x - 7$
   $y = 2x - 3$

8) $2x + 3y = 7$
   $y + 2x = 1$

Exercise 3: Find the solution of the system $y = x - 4$ and $3x + 2y = 18$.

Exercise 4: What is the solution of the system $2x - 10y = 0$ and $x + y = 4$?

Exercise 5: The graphs of the equations $y = x + 2$, $3x + y = 6$, and $y = 5x + 6$ contain the sides of a triangle.
   a) Graph the equations.
Find the coordinates of the vertices of the triangle.