

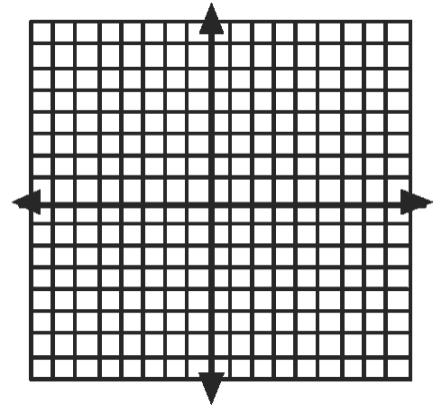
Algebra 2
3.1 - 3.4 Review

Name: _____

1. Solve the system of equations by graphing. Describe it as consistent and independent, consistent and dependent, or inconsistent.

$$x - y = 5$$

$$x + 2y = -4$$



2. Solve the system of equations by substitution.

$$y = -2x + 7$$

$$5x - 3y = 23$$

3. Solve the system of equations by elimination.

$$-6x - y = 27$$

$$3x + 8y = 9$$

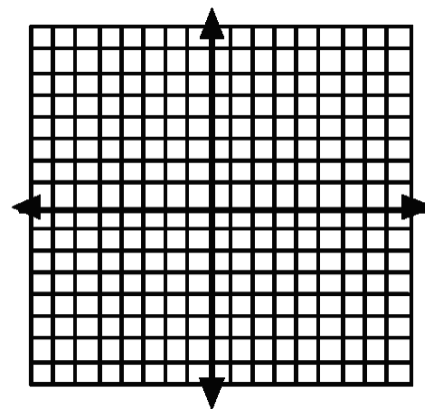
4. Lancaster Woodworkers Furniture Store builds two types of wooden outdoor chairs. A rocking chair sells for \$320, and a stool sells for \$265. Last month, the business earned \$13,930 for 48 outdoor chairs sold. How many rocking chairs were sold?

5. Graph the system of inequalities.

$$y \geq 3x - 7$$

$$y \leq 8$$

$$x + y > 1$$

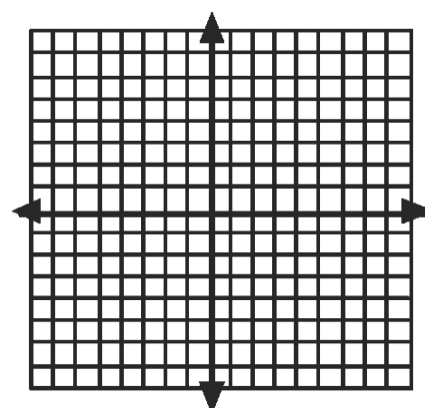


6. Graph the system of inequalities. Name the coordinates of the vertices of the feasible region. Find the maximum and minimum values of the function $f(x, y) = 3x - 2y$.

$$x \leq 5$$

$$y \leq 4$$

$$x + y \geq 2$$



7. Solve the system of equations.

$$4x - 3y + 6z = 18$$

$$-x + 5y + 4z = 48$$

$$6x - 2y + 5z = 0$$