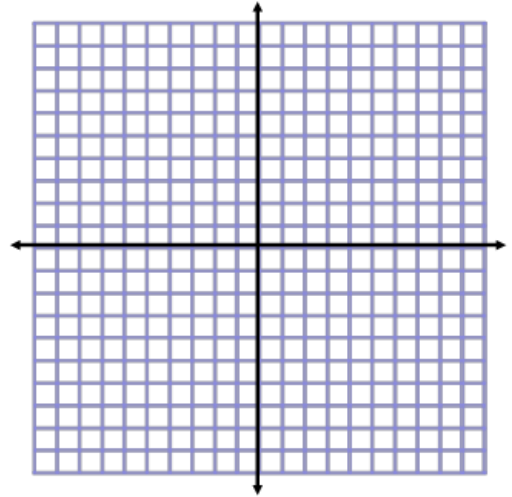1. Solve the system of inequalities equations graphically.

$$y \leq -3x + 7$$
$$-2x + y \leq 2$$

2. For each of following points, circle if the point is either a solution or not a solution for the system of inequalities in problem 1.

   a. $(-1,3)$ Solution   Not a Solution

   b. $(0,2)$ Solution   Not a Solution

   c. $(2,-3)$ Solution   Not a Solution

3. Use quadratic formula to solve for the x-intercepts $y = x^2 + 10x + 28$

4. Use the chart below to complete the following tasks.
   a. Write a linear equation in slope-intercept form that shows the relationship between age and blood pressure.

Age	Blood Pressure
25	108
35	122
45	136

   b. Use your equation to predict the blood pressure of a person who is 60 years old.

   c. Use your equation to estimate the age of a person with a blood pressure of 100.

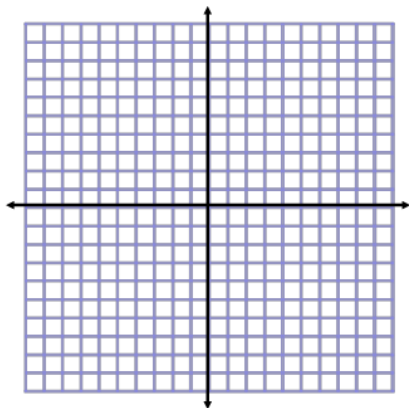Use the following equations to complete problems 5-7.

$$x - 3y = -6$$
$$4x - 2y = 6$$

5. Solve the system of equations by substitution.   6. Solve the system of equations by elimination.

7. Solve the system of equations by graphing.

8. Prove the following equations are equivalent.

$f(x) = 2x^2 + 8x - 64$

$f(x) = 2(x + 2)^2 - 72$

$f(x) = 2(x - 4)(x + 8)$

9. Simplify.

a. i^{131}

b. i^{234}

c. i^{180}

d. i^{57}