To pass this test you can have at most one error, or two small errors in otherwise well explained solutions. Depending on the type of small errors, we may tell you an answer is incorrect and ask you to redo the problem.

1. Find the solution to the following system of equations:

$$7x + 5y = -25$$
$$3x + 7y = -1$$

2. Find the solution to the following system of equations:

5x - 7y = 12- 10x + 14y = -24

3. Find the solution to the following system of equations:

$$30x - 2y = 10$$
$$11x + 4y = -20$$

4. On Monday, Harold picked up three donuts and four large coffees for the office staff. He paid \$4.91. On Tuesday, Melinda picked up five donuts and six large coffees for the office staff. She paid \$7.59. What is the cost of one donut? What is the cost of one large coffee?

5. Graph the solution to the following system of linear inequalities:

$$y \ge x - 3$$
$$x + y > 2$$

Make sure to clearly label the coordinates for the point of intersection of the inequalities.

6. Graph the solution to the following system of linear inequalities:

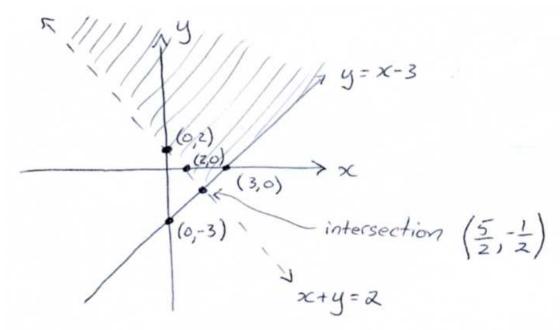
$$5x - 2y \le 10$$
$$x - y \ge -1$$

Make sure to clearly label the coordinates for the point of intersection of the inequalities.

## Solutions

1. (-5, 2)

- **2.** The equations are dependent; there is an infinite number of solutions.
- **3.** (0, -5)
- 4. one donut costs 0.45, and one large coffee costs 0.89.
- 5.



6.

