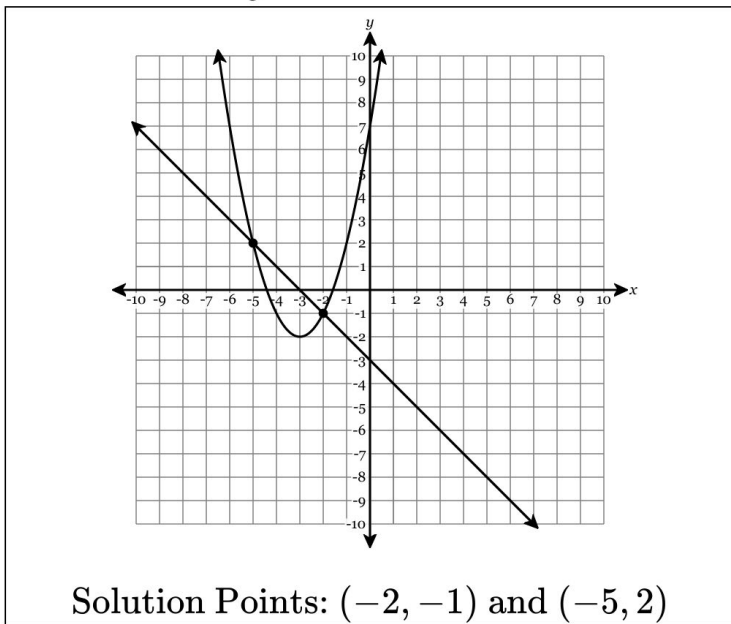


1. On the set of axes below, solve the following system of equations graphically and state the coordinates of all points in the solution set.

$$y = x^2 + 6x + 7$$

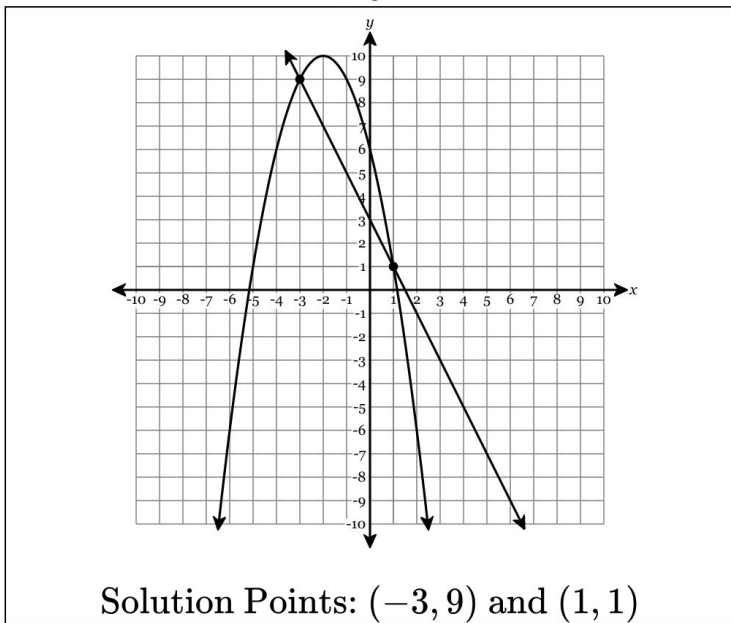
$$y = -x - 3$$



2. On the set of axes below, solve the following system of equations graphically and state the coordinates of all points in the solution set.

$$y = -x^2 - 4x + 6$$

$$2x + y = 3$$



3. Solve the following system of equations algebraically. If there are infinite solutions state “infinite solutions” and if there are no solutions state “no solutions.”

$$y = x^2 - x - 10$$

$$y = -x - 1$$

$$\boxed{(-3, 2) \text{ and } (3, -4)}$$

4. Solve the following system of equations algebraically. If there are infinite solutions state “infinite solutions” and if there are no solutions state “no solutions.”

$$y = x^2 + 4x - 2$$

$$y = -3x - 2$$

$$\boxed{(0, -2) \text{ and } (-7, 19)}$$

5. Find all solutions of the system of equations algebraically. Write your solutions as coordinate points. If there are infinite solutions state “infinite solutions” and if there are no solutions state “no solutions.”

$$y = x^2 - x - 8$$

$$2x + y = 12$$

$$\boxed{(-5, 22) \text{ and } (4, 4)}$$

6. Find all solutions of the system of equations algebraically. Write your solutions as coordinate points. If there are infinite solutions state “infinite solutions” and if there are no solutions state “no solutions.”

$$y = 2x^2 + 8x - 2$$

$$2 = 2x - y$$

$$\boxed{(0, -2) \text{ and } (-3, -8)}$$