

1. What is the result when  $3x^3 + 4x^2 - 26x - 16$  is divided by  $3x - 8$ ?

2. Find all solutions of the system of equations *algebraically*. Write your solutions as coordinate points.

$$y = 2x^2 - 11x + 8$$

$$x + y = 8$$

3. Solve the following system of equations for all three variables.

$$5x + 7y + 2z = -7$$

$$9x + 7y + 2z = 5$$

$$2x - 7y - 5z = -2$$