Date _____

Solving Simultaneous Equations (Linear and Quadratics) - Step-by-Step Lesson

Solve the following simultaneous equations:

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

$$y - x = 2$$

Explanation:

Let's start by getting both equations to equal y.

The first equation is set to equal y. The second can be rearranged as:

y = 2 + x

Find the value of x by substituting and making both equations equal (y = y):

$$x^{2} - 5x + 7 = 2 + x$$

$$x^{2} - 5x - x + 7 - 2 = 0$$

$$x^{2} - 6x + 5 = 0$$

$$x = 5 \quad x = 1$$

Now let's plug those value in:

y - 5 = 2	y - 1 = 2
y = 2 + 5	y = 2 + 1
y = 7	y = 3

So the answer is (1,3) (5,7)



