

3.3.16

How many solutions?  
Times they cross?

many ordered pairs  $(x, y)$  satisfy the system of equations shown?

$$x = 2y + 5$$

$$y = (2x - 3)(x + 9)$$

B) 1

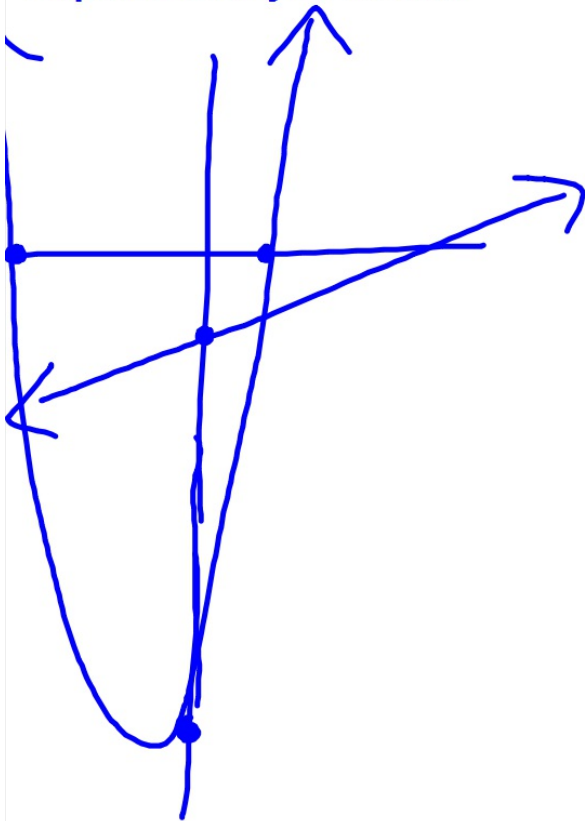
C) 2

D) Infinitely many

- Lines

- Quadratic

Explain how you know.



$$\frac{x-5}{2} = y$$

$$\frac{1}{2}x - \frac{5}{2} = y$$

$$y = (2(0) - 3)(0 + 9)$$

$$y = (-3)(9)$$

$$y = -27$$