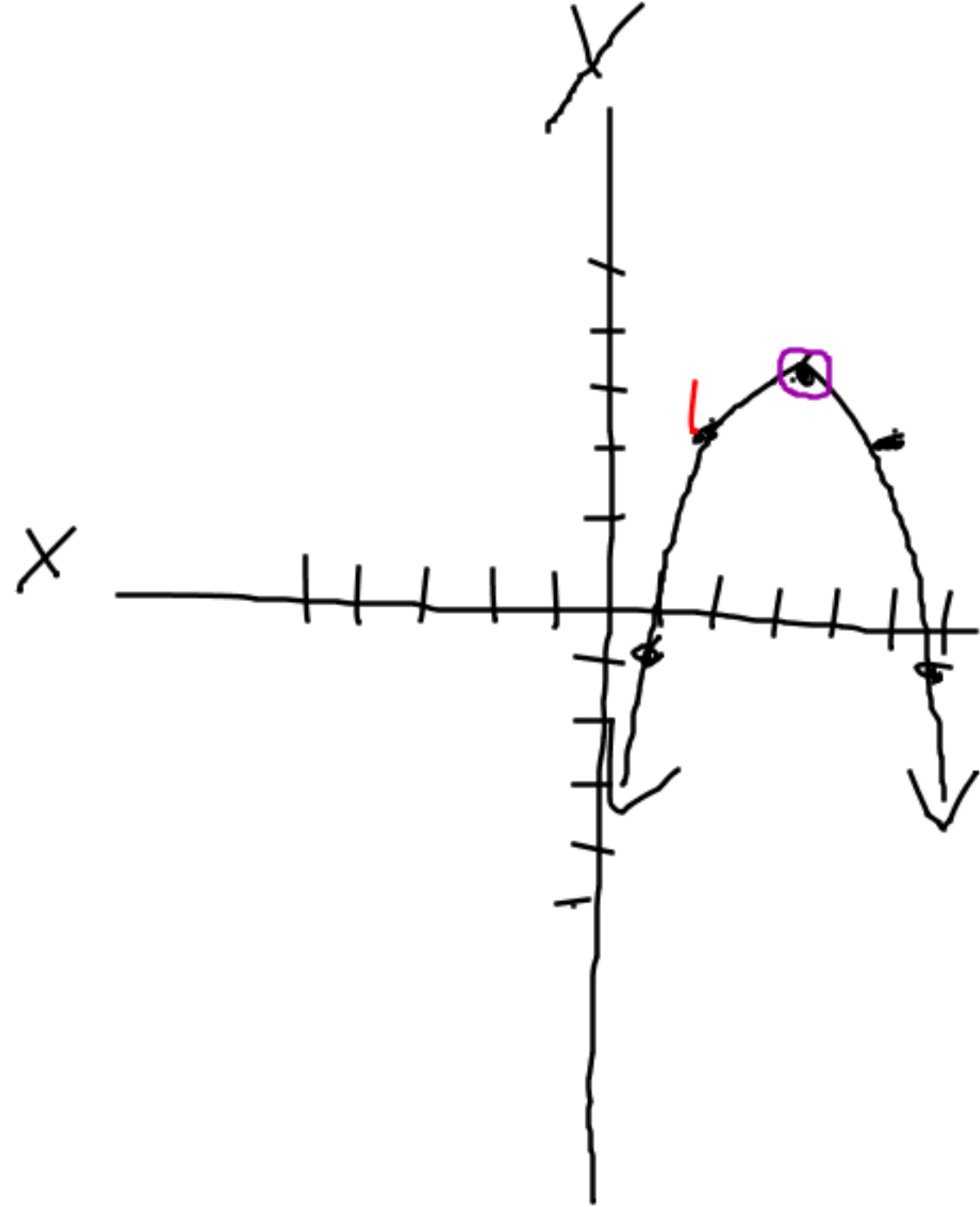


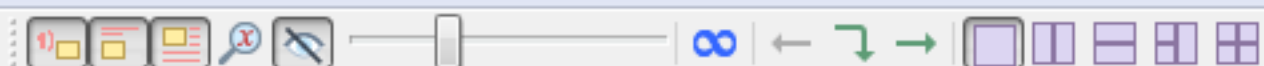


vertex $\rightarrow (3, 3)$

$$y = a(x-h)^2 + k$$

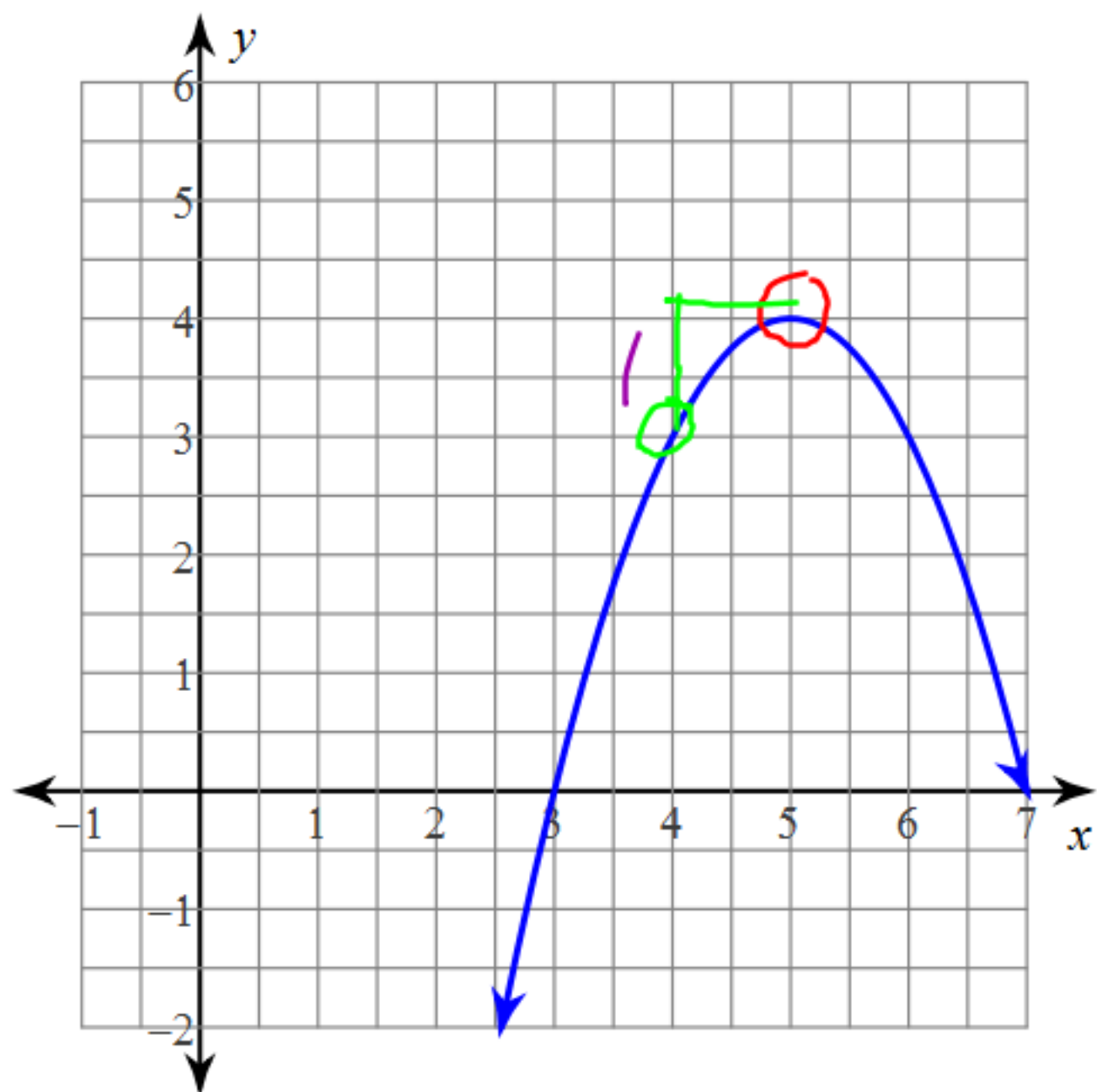
$$a = -1$$

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



Use the information provided to write the vertex form equation of each parabola.

1)



$$\text{vertex} \rightarrow \left(\underset{h}{5}, \underset{k}{4} \right)$$

$$a = -1$$

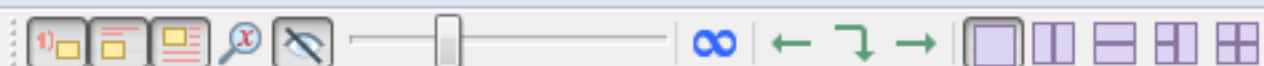
$$y = -(x - 5)^2 + 4$$

$$y = -(x - 5)(x - 5) + 4$$

$$y = -(x^2 - 10x + 25) + 4$$

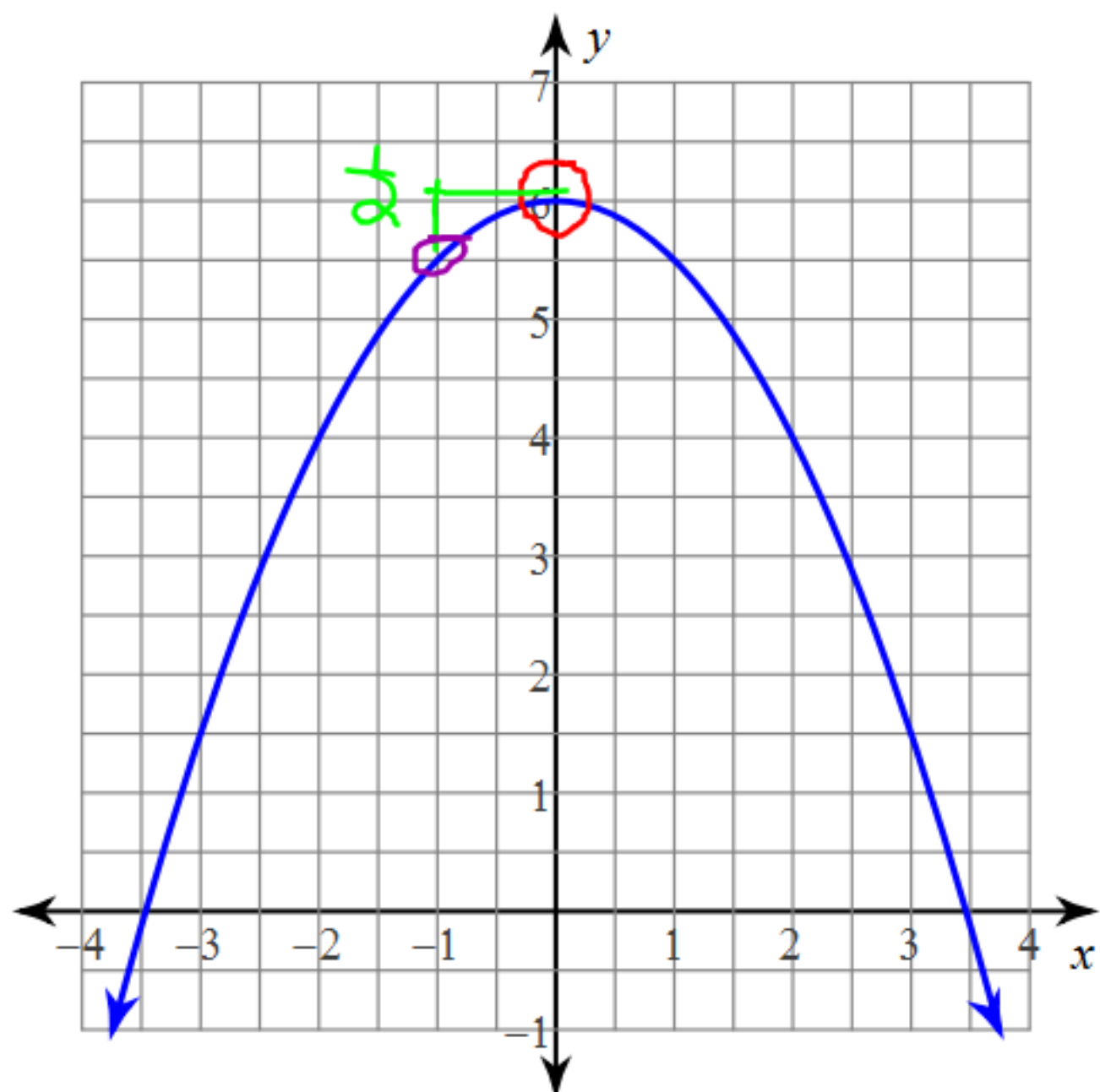
$$y = -x^2 + 10x - 25 + 4$$

$$y = -x^2 + 10x - 21$$



Use the information provided to write the vertex form equation of each parabola.

2)



$$\text{vertex: } (0^h, 6^k)$$

$$a = -\frac{1}{2}$$

$$y = -\frac{1}{2}(x)^2 + 6$$

$$y = -\frac{1}{2}x^2 + 6$$

