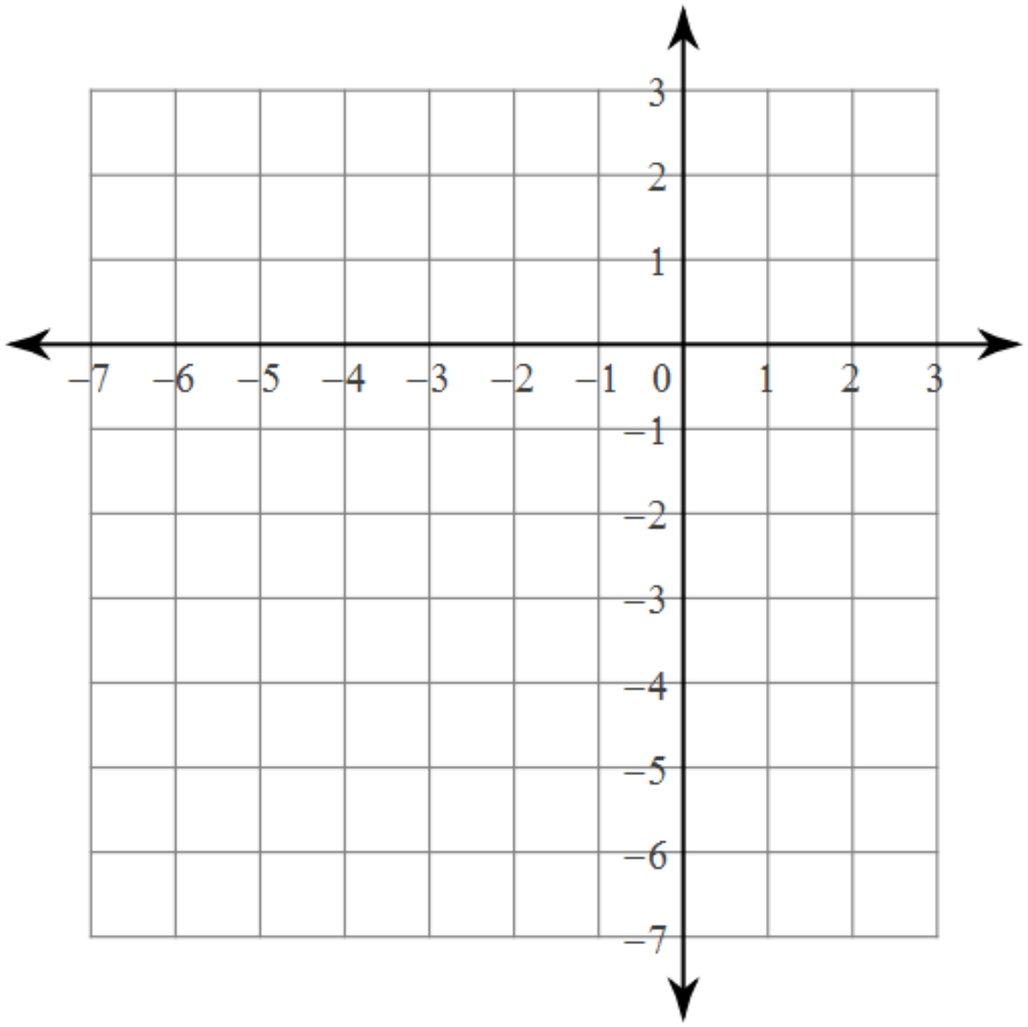
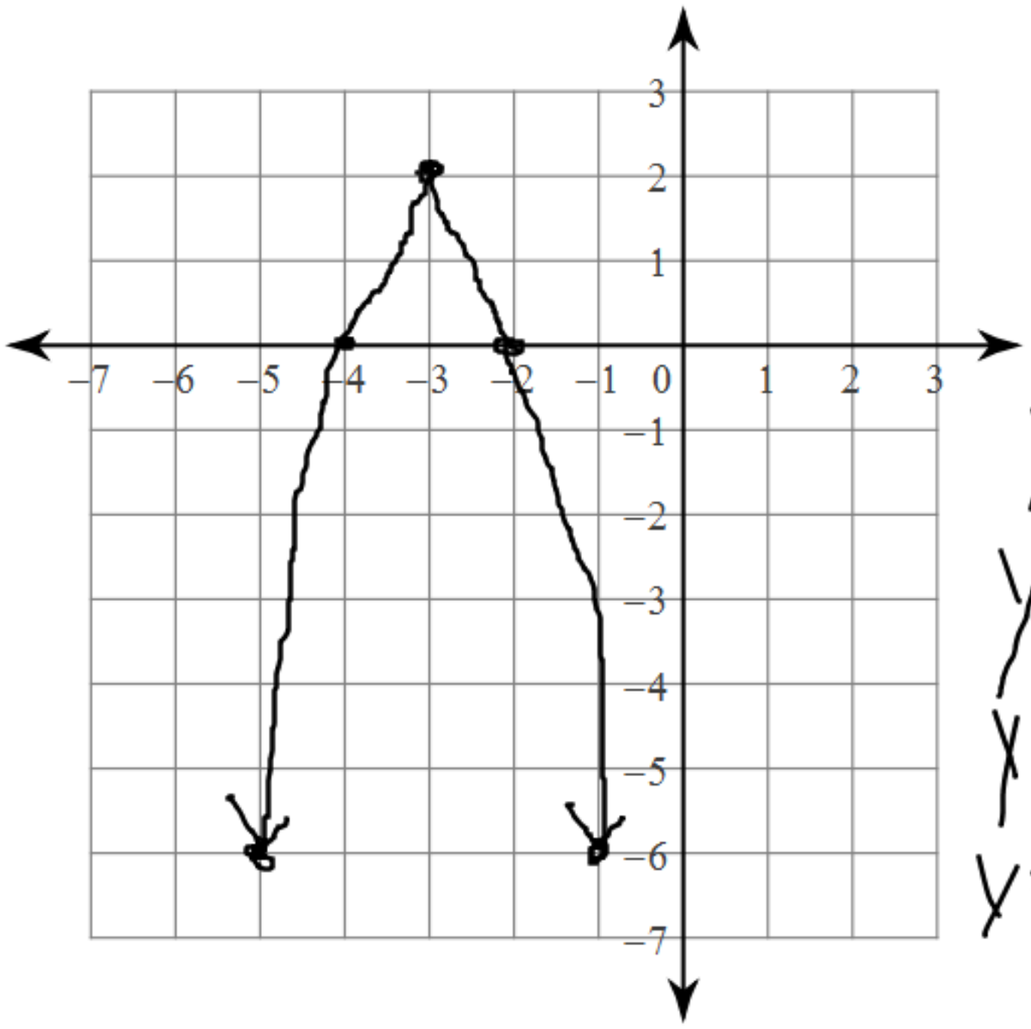
Sketch the graph of each function. CHANGE TO STANDARD FORM.

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



Sketch the graph of each function. CHANGE TO STANDARD FORM.

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



max, vertex $(-3, 2)$

a.o.s $= -3$

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

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

$y = -2(x^2 + 6x + 9) + 2$

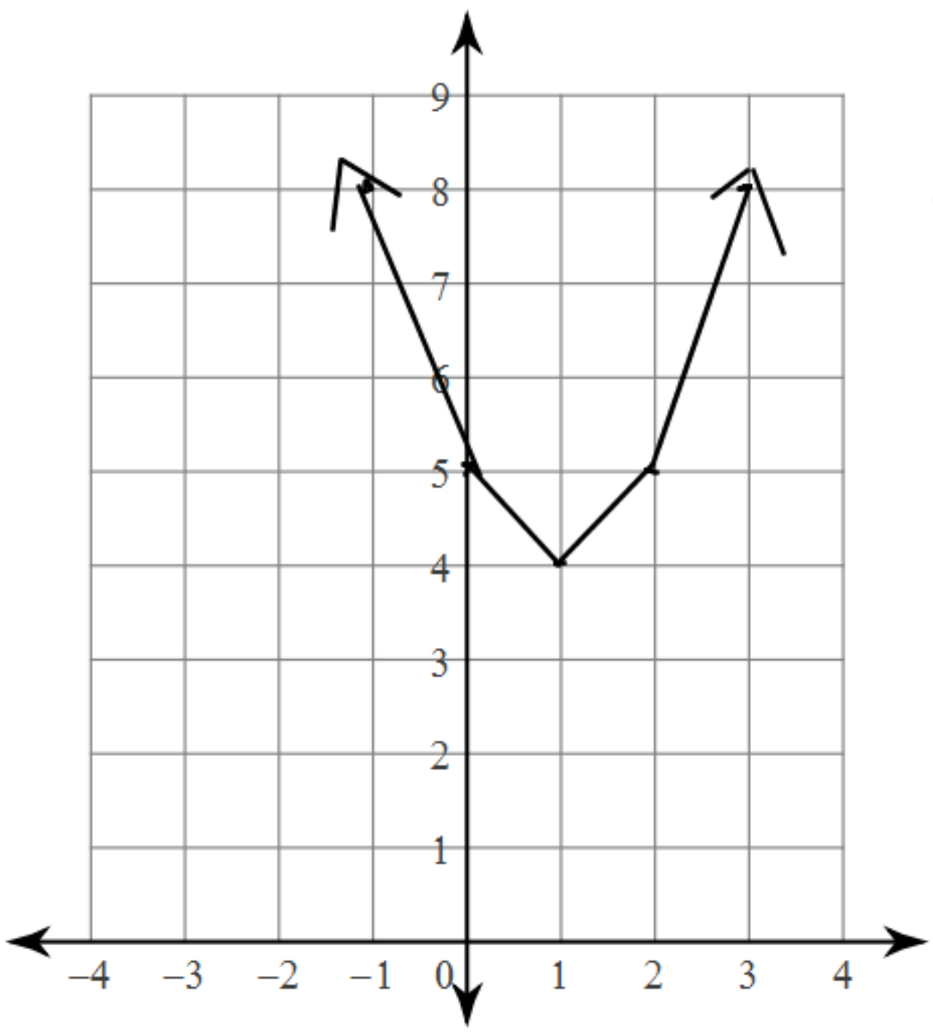
$y = -2x^2 - 12x - 18 + 2$

$y = -2x^2 - 12x - 16$

Sketch the graph of each function. CHANGE TO STANDARD FORM.

a = 1, vertex (1, 4), min.

3) $y = (x-1)^2 + 4$



$y = (x-1)(x-1) + 4$

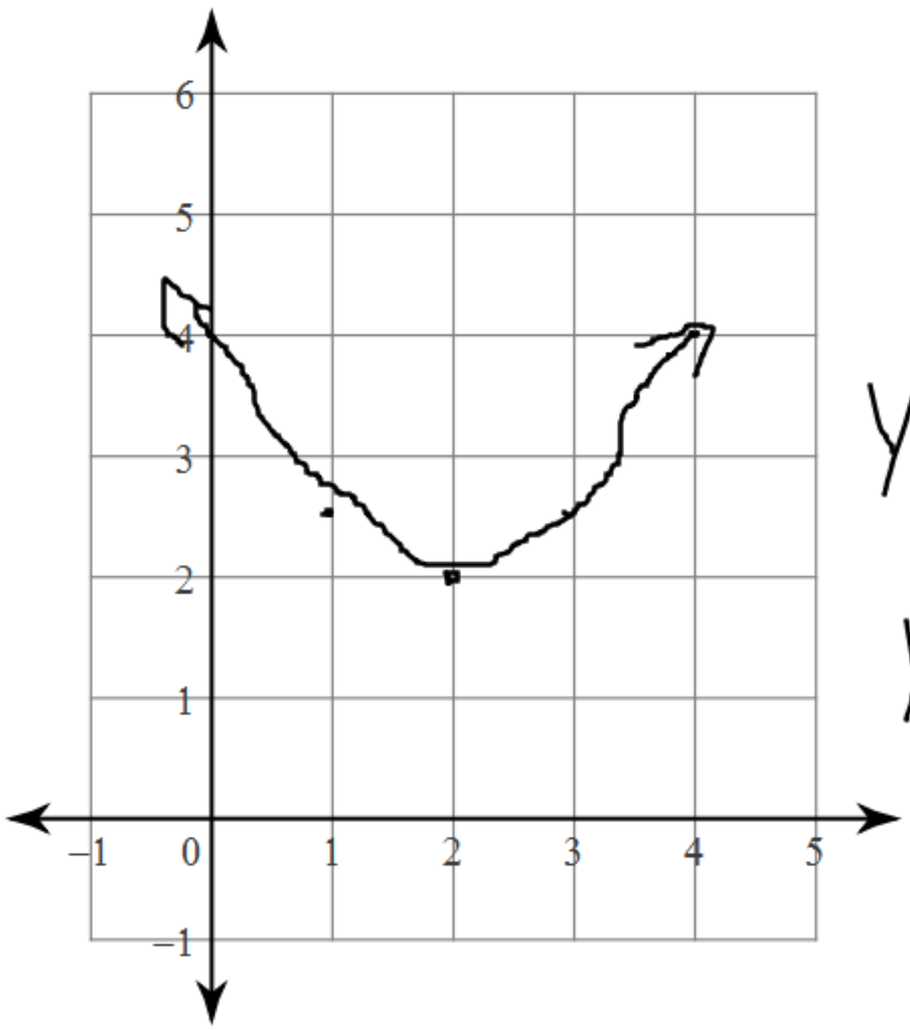
$y = x^2 - 1x - 1x + 1 + 4$

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

Sketch the graph of each function. CHANGE TO STANDARD FORM.

vertex → (2, 2) , min, a of $\frac{1}{2}$

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



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

$y = \frac{1}{2}(x^2 - 2x - 2x + 4) + 2$

$y = \frac{1}{2}(x^2 - 4x + 4) + 2$

$y = \frac{1}{2}x^2 - \frac{4}{2}x + \frac{4}{2} + 2$

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

$y = \frac{1}{2}x^2 - 2x + 4$

Sketch the graph of each function. CHANGE TO STANDARD FORM.

4) $y = 2(x + 3)^2 + 1$