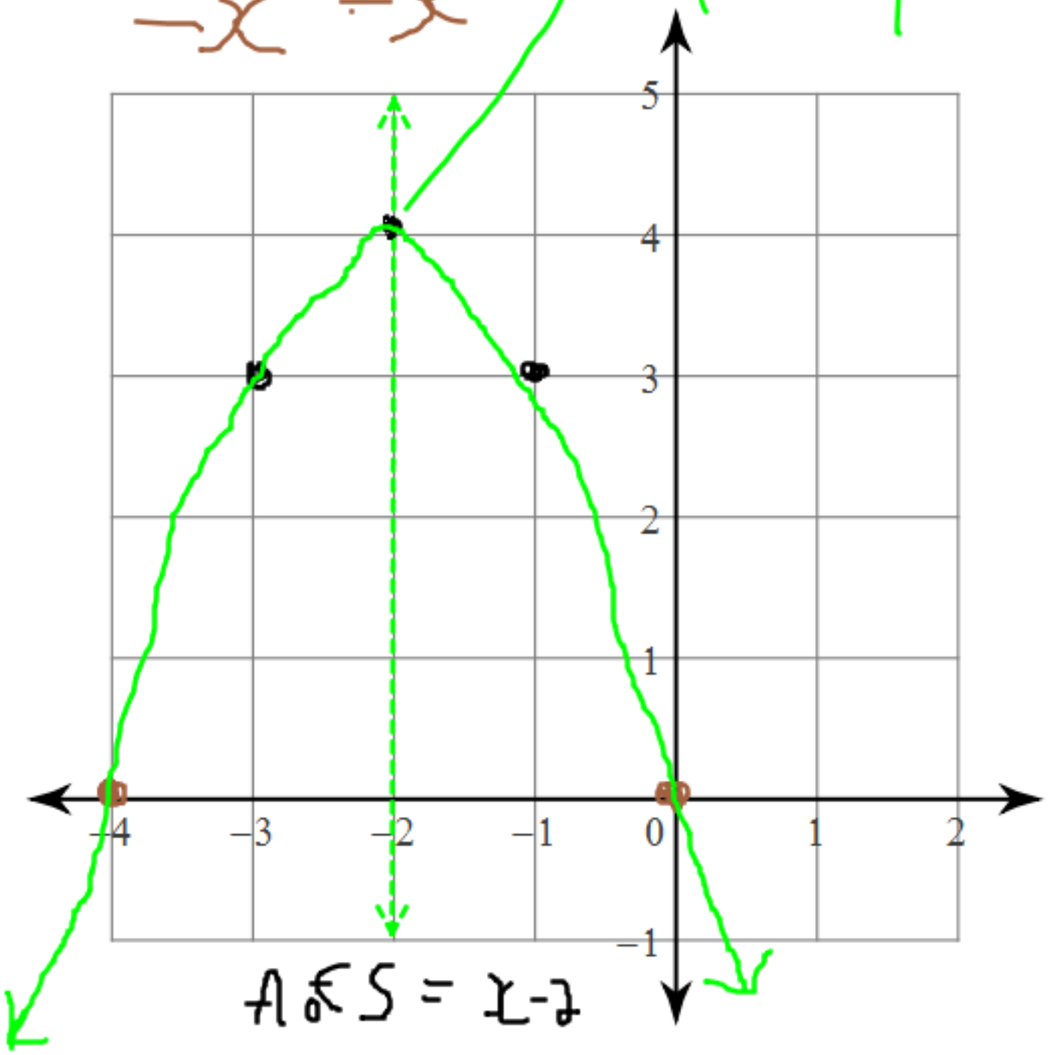
Sketch the graph of each function.

7) $y = -x^2 - 4x$



vertex
(-2, 4)

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

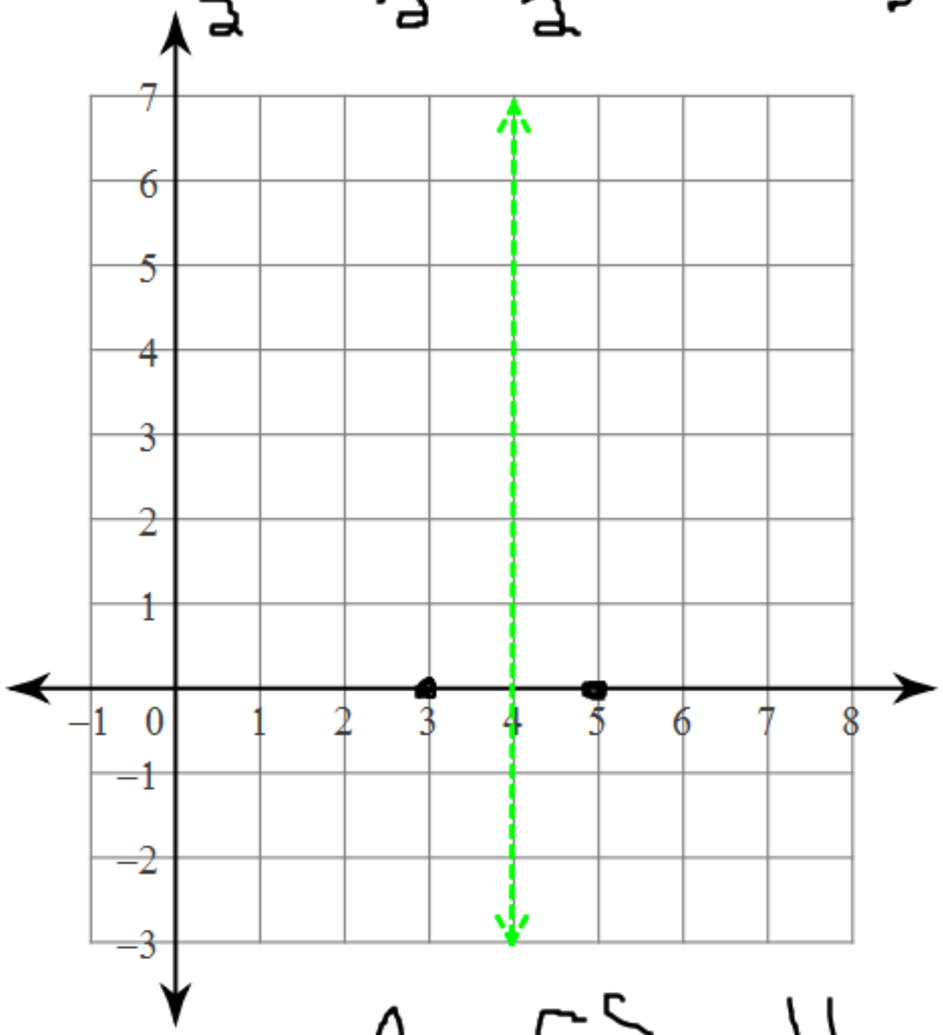
either $-x=0$ or $x+4=0$
$-1 \quad -1$

$x = 0 \quad x = -4$

$\{0, -4\}$

Sketch the graph of each function.

8) $y = \frac{2x^2}{2} - \frac{16x}{2} + \frac{30}{2}$



Axis of S = 4

$y = x^2 - 8x + 15$

$y = (x-3)(x-5)$

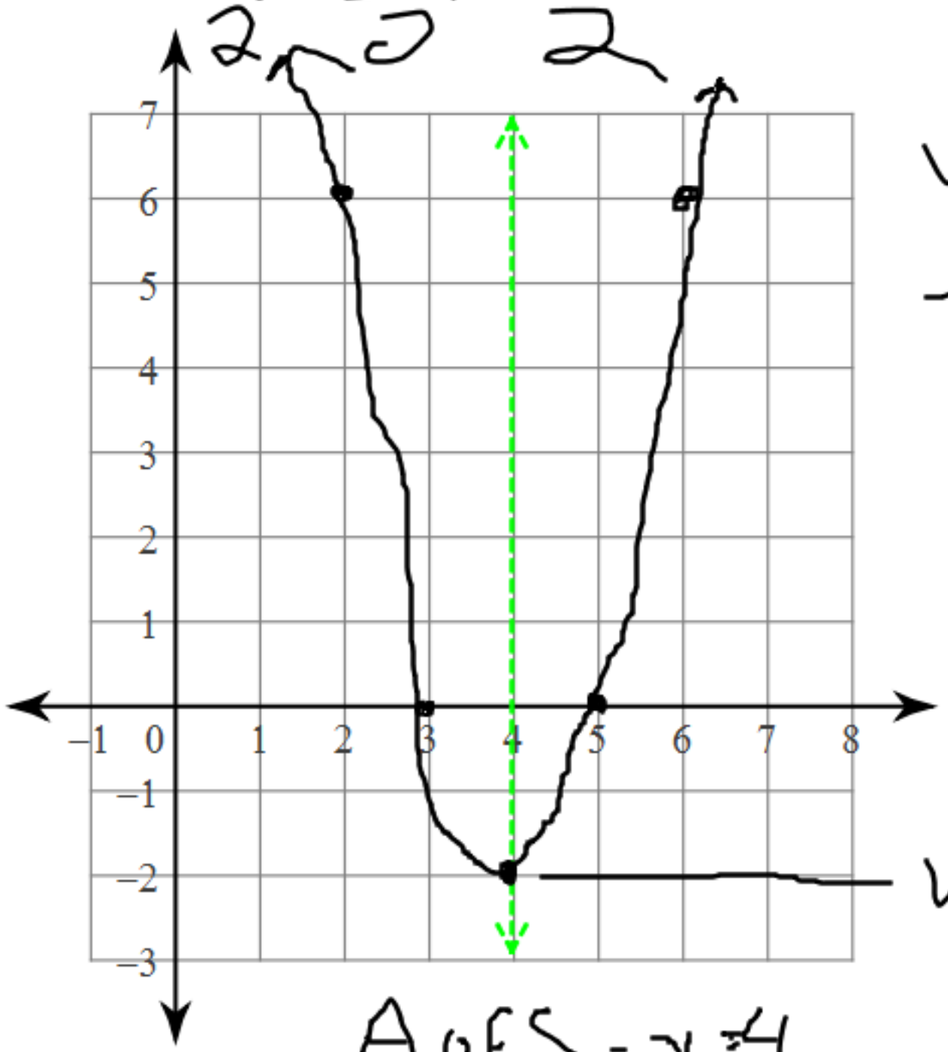
either $x-3=0$ or $x-5=0$

$x=3$ $x=5$

SS {3,5}

Sketch the graph of each function.

8) $y = 2x^2 - 16x + 30$



$y = 2(x^2 - 8x + 15)$

$y = 2(x-3)(x-5)$

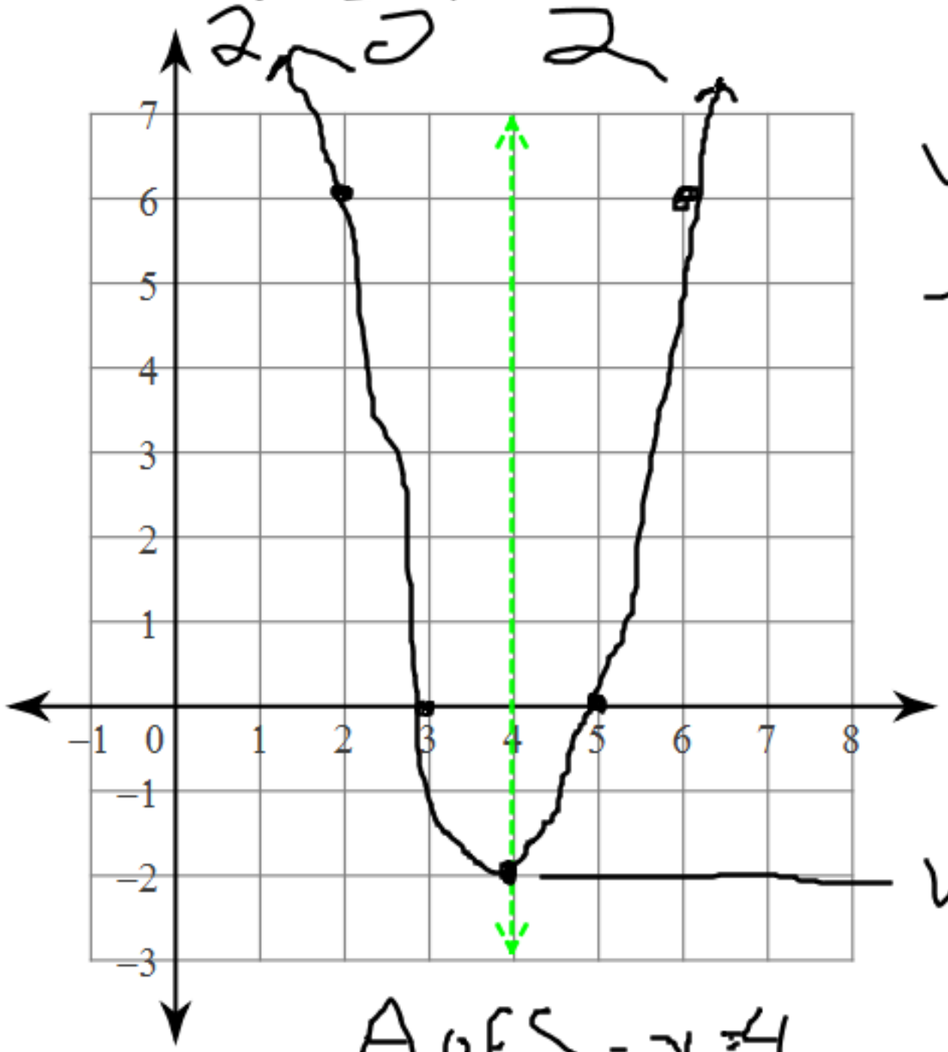
$SS = \{3, 5\}$

vertex $(4, -2)$

AOFS $= x = 4$

Sketch the graph of each function.

8) $y = 2x^2 - 16x + 30$



$y = 2(x^2 - 8x + 15)$

$y = 2(x-3)(x-5)$

$SS = \{3, 5\}$

vertex $(4, -2)$

AOFS $= x = 4$