$f(x) = \mathbf{2}x^2 + \mathbf{4}x + \mathbf{5}$

$\uparrow \qquad \uparrow \qquad \uparrow$

$\mathbf{a} \qquad \mathbf{b} \qquad \mathbf{c}$

$a = 2 \qquad b = 4 \qquad c = 5$

**Since 4 is positive, we take the opposite of 4, which is negative 4.

$\dfrac{-b}{2a} \qquad \dfrac{-4}{2 \cdot 2} = \dfrac{-4}{4} = -1$

The x coordinate of the vertex is -1.