

On the axis below, graph the function $y = 3 \sin(x) - 3 \cos(x)$

$$a = 3; b = -3; \sqrt{a^2 + b^2} = \sqrt{18}; \theta = \frac{7\pi}{4}$$
$$y = 3 \sin(x) - 3 \cos(x) = \sqrt{18} \sin\left(x + \frac{7\pi}{4}\right) = \sqrt{18} \sin\left(x - \frac{\pi}{4}\right)$$

