Let $f(x) = \sin(x)$

1. Plot $y = f(x)$ over the interval $[0, 2\pi]$ and use zooming to estimate

$$f'(0), \qquad f'(\pi/6), \qquad f'(\pi/4)$$

$$f'(\pi/3), \qquad f'(\pi/2), \qquad f'(\pi)$$

2. Use the symmetry of the sine function and your answers from #1 to estimate

$$f'(2\pi/3), \qquad f'(3\pi/4), \qquad f'(5\pi/6)$$

3. Sketch a graph of f' over the interval $[0, 2\pi]$