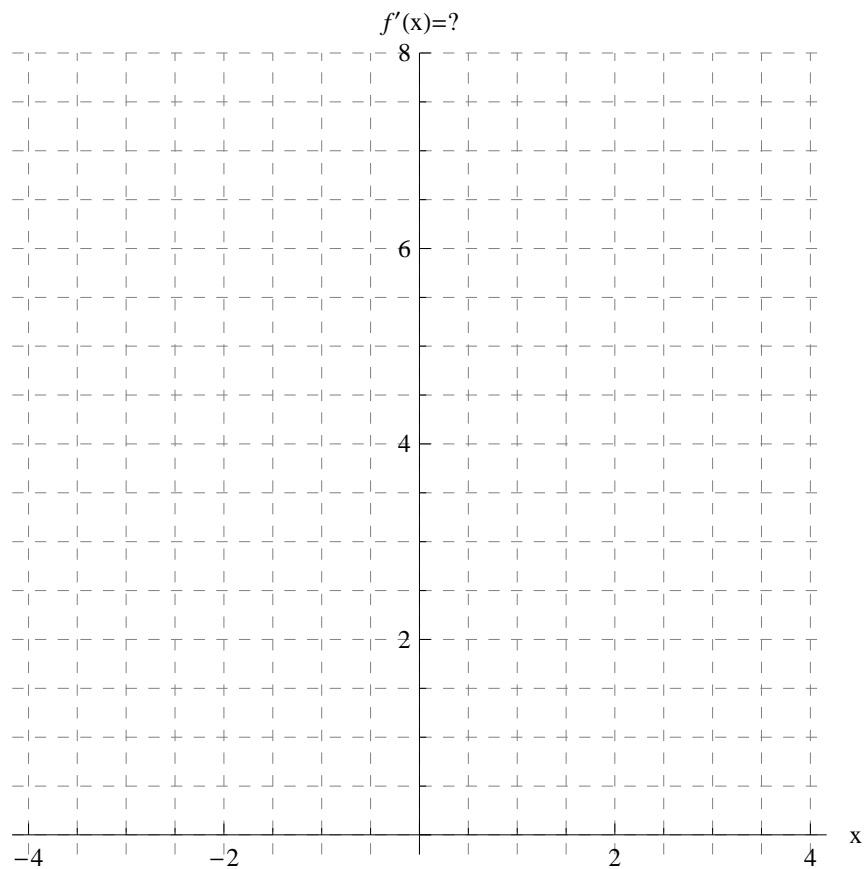
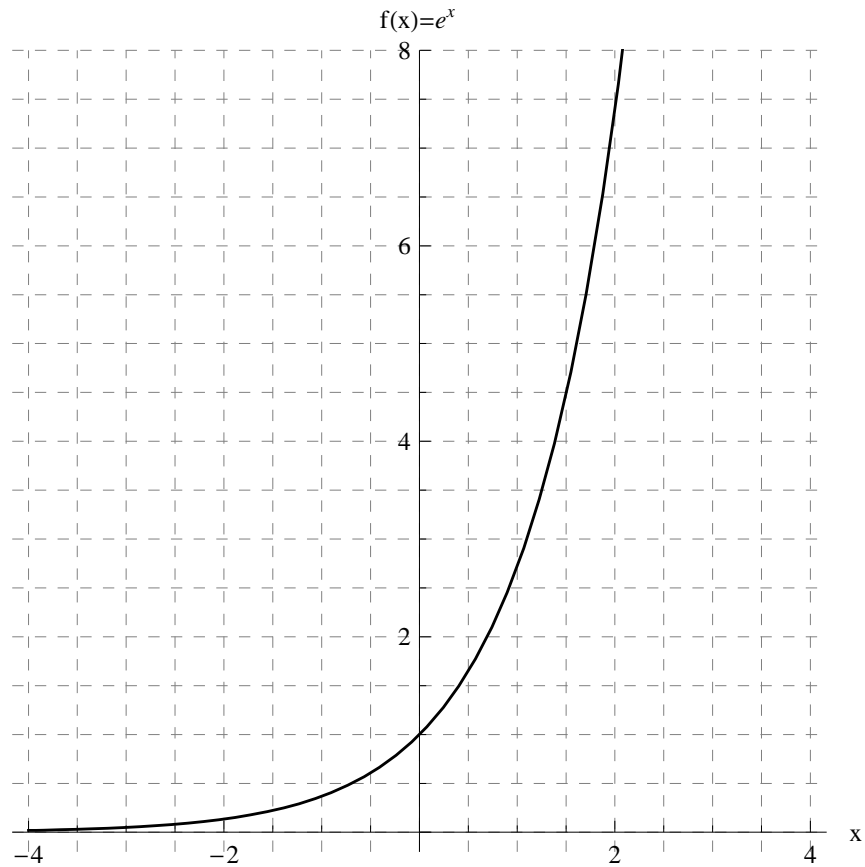


For each of $x = -2.0, -1.5, -1.0, -0.5, 0.0, 0.5, 1.0, 1.5, 2.0$ estimate the slope of the tangent line on the graph of $f(x) = e^x$ and plot this value on the axes below for the graph of $f'(x)$. Finally, draw a curve through the points you've plotted for $f'(x)$ and make a conjecture about what this function is.



For each of $x = 0, \frac{\pi}{8}, \frac{\pi}{4}, \frac{3\pi}{8}$ and $\frac{\pi}{2}$, estimate the slope of the tangent line on the graph of $f(x) = \sin(x)$ and plot this value on the axes below for the graph of $f'(x)$. Then use symmetry to determine estimates of tangent line slopes for other multiples of $\frac{\pi}{8}$ up to 2π . Finally, draw a curve through the points you've plotted for $f'(x)$ and make a conjecture about what this function is.

