**Quiz** **Name**

**1.** Compute the limit $\lim_{x \to \sqrt{5}} \dfrac{x^2 - 5}{x - \sqrt{5}}$.

**2.** Compute $\lim_{x \to 2} \frac{f(x) - f(2)}{x - 2}$ for $f(x) = \sqrt{x}$. Draw a graph of this function in the coordinate plane below and provide an interpretation of the limit you have computed.

**3.** Check that the point $(1, 2)$ is on the graph of the function $f(x) = \sqrt{x^2 + 3x}$ and then determine an equation for the tangent line to the graph at that point.