

Math 2215 - Calculus 1

Quiz #9 - 2011.03.04

Name: _____

Consider the function $f(x) = \sqrt[5]{x}$.

1. Compute the tangent line to $f(x)$ at $x = -32$.

2. Use your answer to problem 1 to approximate $\sqrt[5]{-31.7}$ as a fraction of two integers (i.e. as a rational number).

3. Using your knowledge about the graph of $f(x) = \sqrt[5]{x}$, will the real value of $\sqrt[5]{-31.7}$ be larger or smaller than your approximation?