
Quiz 4

1. Find the linearization of $y = \sqrt{x}$ at $x = 1$ and use it to approximate $\sqrt{2}$. (10 pts.)
2. Find the open intervals where $y = x^4 - \frac{2}{3}x^6$ is increasing and the open intervals where it is decreasing. *Hint: make a first derivative sign chart first* (10 pts.)