

Linearization

HW 3-9

Use linearization to complete the approximation, and state if it is an overestimation or an underestimation.

1) $f(x) = x^3 - 2x + 3$,
approximate $f(2.1)$

2) $f(x) = \sqrt{x^2 + 9}$,
approximate $f(-3.9)$.

3) Approximate $\sqrt{101}$.

4) Approximate $\cos 62^\circ$.