AP: Homework
10/16-10/20

due: Tuesday: read pp. 237-240

1. If $f(x) = x^2 + 2x - 7$, find:
   a. Δy b. dy c. $\Delta y - dy$
2. Using differentials, approximate:
   a. $\sqrt{36.2}$
   b. $\sqrt[3]{7.9}$

Wednesday: read pp. 233-234

1. pg. 242 / #1a, 2a, 3a
2. Using differentials, approximate $\sqrt[4]{81.1}$.

Thursday: read pg. 165

Let $g(x)$ be the inverse of $f(x)$.

a. If $f(x) = 2x + 3$, find $g'(1)$.
b. If $f(x) = \frac{1-2x}{x+2}$, find $g'(-7)$.

on: Friday: test

due: Monday: read pp. 196-198

1. pg. 202 / #1, 3
2. If the number c satisfies the conditions of Rolle's Theorem for the function *f* on the given interval, find c:
   a. $f(x) = x^3 - 4x^2, [0,4]$ b. $f(x) = x^4 - 1, [-1,1]$
3. If the number c satisfies the conditions of the Mean Value Theorem for the function *f* on the given interval, find c:
   a. $f(x) = cosx, [2,4]$ b. $f(x) = x^3 - 2x^2, [0,2]$