

HW 3

Write up the following problems, and pass them in during class on Monday. You must show work to get credit.

1. Graph the function $f(x) = \frac{1}{2}(x - 1)^2 + 2$ from $x = -3$ to $x = 4$.
2. Graph the function $f(x) = \frac{1}{3}x^3 + 4x^2 - \frac{2}{3}x + 1$ from $x = -1$ to $x = 5$, and on the same axes, graph the inverse function, $f^{-1}(x)$.
3. By drawing a graph, estimate all solutions x to the equation

$$\sqrt{x} = \frac{1}{3}(x + 1)$$

4. Do problem 2.2.7 from the text.
5. Do problem 2.2.10 from the text.