Math 241: HW 5

Due on Monday, September 16

Fall '13

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Problem 1

Use the IVT to show that the polynomial $x^3 - x^2 + x - 1$ has a root on the interval $[0, 2]$.

Problem 2

Using the limit definition of the derivative, compute the following derivatives:

$$f(x) = x^3$$
$$f(x) = 10x^2$$
$$f(x) = x^2 + x$$
$$f(x) = \sqrt{x}$$
$$f(x) = \frac{1}{x + 3}$$