Math 105 Quiz 7
§4.8, 4.9, 5.1
Name:
Show all work for credit.

1. State the Mean Value Theorem.

2. Verify the hypothesis of the Intermediate Value Theorem in the interval [0,5] for the function $f(x) = x^2 + x - 1$ and find the value of c guaranteed by theorem when $f(c) = 11$.

3. Suppose $\int_{-2}^{2} f(x) = 7$, $\int_{2}^{8} f(x) = 4$, and $g(x)$ is an odd function. Find the following:

   (a) $\int_{-2}^{8} f(x)dx$

   (b) $\int_{-2}^{2} [f(x) + g(x)]dx$

   (c) $\int_{0}^{4} (x - 1)dx$