

Name:

SOLUTIONS

Quiz #10, December 5, 2007

1. State both parts of the Fundamental Theorem of Calculus.

1. Suppose  $f(x)$  is cont on  $[a, b]$ . Let  $g(x) = \int_a^x f(t) dt$   
Then  $g'(x) = f(x)$ .

$$2. \int_a^b f'(x) dx = f(b) - f(a)$$

2. Find the general indefinite integral  $\int e^x + x^3 dx$ .

$$e^x + \frac{1}{4}x^4 + C$$