

## Calculus II - Quiz 1

Name: \_\_\_\_\_

Box # \_\_\_\_\_

1. Compute the following definite integrals

$$\int \frac{2x^2 - x^3}{5} dx =$$

$$\int \frac{1}{2} \sqrt[3]{x} - \frac{2}{\sqrt[3]{x}} + \frac{1}{2x} dx =$$

$$\int 4 \cos(t) - 3 \sin(2t) + \sec^2(t) dt =$$

$$\int \frac{e^{ax} - e^{-ax}}{5} dx =$$

2. A car passes through an intersection at 50 ft/sec and accelerates at 10 ft/sec<sup>2</sup> until the speed is 70 ft/sec. How far did the car travel after the acceleration period.