Student ID:

Math 101, Section 15 Spring 2016, Term 152 Quiz 1 Version A Student ID. Student Name:

Serial Number:

## Instructions: Show Your Work!

- **1.** (6 pts) Let  $f(x) = x^2$  be defined on the interval [0, 2].
  - (a) Using left endpoints, express the definite integral of f from x = 0 to x = 2 as a limit.
    - $\begin{array}{c} \text{or } j \text{ from } x = 0 \text{ to } x = 2 \text{ as a fractional states} \end{array}$
  - (b) Evaluate the limit in (a).

**2.** (4 pts) If

$$f(x) = \int_{2}^{x^{3}+3x} (t^{3}+1)^{15} dt,$$
 find  $f'(0).$ 

Student ID:

Math 101, Section 27 Spring 2016, Term 152 Quiz 1 Version B Student Name:

Serial Number:

## Instructions: Show Your Work!

**1.** (6 pts) Let  $f(x) = x^2$  be defined on the interval [0, 2].

- (a) Using left endpoints, express the definite integral of f from x = 0 to x = 2 as a limit.
- (b) Evaluate the limit in (a).

**2.** (4 pts) If

$$f(x) = \int_{2}^{x^{4} - 5x} (t^{3} + 1)^{27} dt,$$
 find  $f'(0)$ .