

Name: _____

Quiz 2

Math 252

You have 20 minutes to complete this quiz. When you're finished, first check your work if there is time remaining, then turn it in. You may use your class notes (i.e. not the online notes), and a scientific calculator, but not a graphing one. You may not consult other people or the internet. **Show all your work.**

1. (4 points) Let $f(x)$ be a function and let $F(x)$ be an antiderivative of f . Use the Fundamental Theorem of Calculus (part II) to complete the formula:

$$\int_1^2 f(x) \, dx =$$

2. (8 points) Evaluate $\int (3t + \sin(t)) \, dt$.

- 3.** (8 points) What is the average value of $g(x) = \sin(x)$ on the interval $[0, \frac{\pi}{3}]$?