Name: _____

Quiz 2

Math 252

You have 20 minutes to complete this quiz and upload your work to Canvas. Write your answers on a separate sheet of paper and scan them with a scanning app. When you're finished, first check your work if there is time remaining, then turn it in. You may use a scientific calculator, but not a graphing one, and you may not consult other people or the internet. **Show all your work.**

1. (4 points) If $2 \leq f(x) \leq 5$ for all x with $-1 \leq x \leq 2$, then $A \leq \int_2^5 f(x) \, dx \leq B$ for some numbers A and B. What are A and B?

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 $[0, \frac{\pi}{3}]$?