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

## Quiz 7

## Math 252

This quiz is optional. If you would like to take it for practice and get detailed feedback, which I recommend doing, set yourself a timer for 20 minutes, write your answers on a separate sheet of paper, and scan and email that to me no later than Saturday night. I'll grade it and get it back to you as soon as I can.

1. (4 points) Evaluate  $\int_0^1 \frac{1}{x^2} dx$ .

**2.** (8 points) Evaluate  $\int_0^\infty xe^{-x} dx$ .

**2.** (8 points) Solve the differential equation  $y' = \frac{x^2}{\cos(y)}$ , given that  $y(0) = \pi$ .