Math 252, Fall 2020   Name: _____

Quiz 4   Due: Midnight, Sept.14

In **30 minutes** do the following problems, **without help** from any references, computing devices, or people. Write your solutions on either a printout or blank paper. If you use blank paper, do the problems on **1 sheet of paper, in the order given.** Upload a pdf of your solutions to **Gradescope, by midnight.**

Show your work.

1. Evaluate $\displaystyle\int_1^2 t^5 e^{t^3}\, dt$

2. For the integral $\displaystyle\int_2^4 \frac{1}{x^2}\, dx$,

   (a) Write down the Trapezoid sum approximation using $n = 4$. **Do not simplify.**

   (b) Is your answer to (a) larger or smaller than the true value of the integral? Briefly explain how you know.