

Please read the following instructions carefully:

- There are **two problems** in this quiz.
- The point distribution is given in the table below.
- Please write each solution on a separate page.
- This is a group quiz. Feel free to discuss the problems with your teammates. **You must, however, write and turn in your own work.**
- Upload your work to Gradescope.

| | | | |
|-----------|---|---|-------|
| Question: | 1 | 2 | Total |
| Points: | 5 | 5 | 10 |

1. (5 points) Evaluate the following integrals:

(a)

$$\int (e^{5x} + x^4 + (2x + 1)^{10}) dx$$

(b)

$$\int_1^e \left(4x + \frac{1}{x}\right) dx$$

2. (5 points) Write down the integral that computes area enclosed by the curves $y = x$ and $y = 2x^2 + 5x$ between their points of intersection. Do **NOT** evaluate the integral.