

# Math 1B Quiz 3

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<http://math.berkeley.edu/~theo/f/08Summer1B/>

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Name: \_\_\_\_\_ Score: \_\_\_\_\_ /10

*You have twenty minutes to complete the following quiz. The quiz is closed-note but open-chalkboard. Although you do not need to write down every step of your calculation, you do need to show enough work that I know how you did each problem (no points will be given for simply writing down the correct answer). Partial credit will be awarded for correct work. Please box your final answers. You do not need to simplify your final answers.*

1. (5 pts) Determine whether the following integral converges or diverges. If it converges, evaluate it to find a number. If it diverges, explain how you know.

$$\int_0^{\infty} \frac{x}{(x^2 + 3)^2} dx$$

2. (0 pts) What is one thing you like about this class so far? What is one thing you don't like?

3. (5 pts) Determine whether the following integral converges or diverges. If it converges, evaluate it to find a number. If it diverges, explain how you know.

$$\int_0^1 \frac{5}{x^6} dx$$