

- To use this as a practice quiz, you should have studied the problem banks in advance.
- Put away all material and set a timer for 15 minutes. (You will have 15 minutes for this quiz in class.)
- Go to your math mentors study hours to check your answers.

Practice Quiz: Basic Integrals, Fall 2017

Version: 1

Name (Print): \_\_\_\_\_ RIN: \_\_\_\_\_

Math Mentor Name: \_\_\_\_\_

**Rules:** Notes, calculators, cell phones and headphones are not allowed.

**Honor Code Pledge:** I did not violate any rules on this quiz and have no knowledge of any other student violating rules on this quiz. \_\_\_\_\_ (Signature)

**Instructions:** Put your final answer in the box shown. No partial credit will be given and nothing outside the box will be graded.

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1. Express the indefinite integral  $\int 8 (\sec (t))^2 dt$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

2. Express the indefinite integral  $\int \frac{4x^5 + 5x^4 + 3}{x} dx$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

3. Express in simplified form the value of  $\int_0^1 (2x^{\frac{5}{2}} + x^{\frac{2}{3}}) dx$ .

4. Express the indefinite integral  $\int (2x + 2)(x^2 + 2x + 4)^5 dx$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

5. Express the indefinite integral  $\int 7x^3 e^{-x^4} dx$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.