

- 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: 2

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  $\int \frac{2x^5 + 7x^3 - 5}{x} dx$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

2. Express the indefinite integral  $\int (5(\sec(x))^2 + 7e^x) dx$  in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

3. Evaluate  $\int_1^4 \frac{1}{x^{1/3}} dx$ . Express your answer in simplified form.

4. Express in simplified form the value of  $\int_0^1 (2x + 4) dx$ .

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