# Section 7.3: Trigonometric Integrals MATH 131: Calculus II, Section 2

Name (Print):

Due: Wednesday, October 17, 2018 at the beginning of class

After reading Section 7.3 (pages 523-529 in the text), respond to the following questions on this handout. Be sure to staple your pages together before turning it in if they are not double sided. You must answer all parts to all questions to earn full credit!!! Also, use FULL SENTENCES to answer questions that require words. See the salmon homework guidelines handout for details. You are encouraged to take additional notes wherever you are keeping your class notes.

### **Response Section**

1. List the five trigonometric formulas that are useful for integrating products of powers of trigonometric functions (I am NOT referring to the reduction formulas here; I am referring to formulas found within the first two pages of text for the section). For each formula, note one **specific** example when you might want to use that formula (make sure it is clear which example goes with which formula; you could make a table to make this clear). You do not need sentences for this question.

2. Explain how you would evaluate  $\int \cos^3 x \, dx$ . That is, explain in full sentences the steps you would follow.

3. Show that the two solutions in Example 4 (a) on pages 528-529 are equivalent. Do not reintegrate the function! Use the hint in the text at the end of part (a) on page 529!

## **Questions/Overview Section**

4. Write down any **questions** you have on the reading. Be as specific as possible! See the salmon homework guidelines handout for details.

## **Reflection Section**

5. Write **two or three** sentences reflecting on the process of your work so far in the course. See the salmon homework guidelines handout for details.

### **Time Section**

6. How much time did you spend on this reading assignment?