Reading Assignment for Section 7.2

MATH 131: Calculus II, Section 1
Spring Semester 2014

Follow the general guidelines for the Reading Assignment (the salmon colored handout). Be sure to include and label all four standard parts 1,2,3,4 of the Reading Assignment in what you hand in. Be sure to **staple** together pages if you have more than one, and include your **name** at the top of at least the first page. Neatness is appreciated!!!

Due: by the beginning of class on Monday, March 10th

Read:

Section 7.2, pages 460-466: Trigonometric Integrals! Do the Quick Checks along the way! Check your answers to them at the end of the Exercises for Section 7.2!

Notes:

Do you remember that WeBWorK problem you couldn't integrate? Well, in this section you will find tools for how to solve such integrals! Don't be shy of the trigonometric functions! We find ways to use some old formula friends to rewrite these integrals to look like easier algebraic functions! Great puzzles!

Remember that your answers should include complete sentences for every question. Be sure to address all parts of each question.

Reading Questions for part (1):

a) List the five formulas that are useful for integrating products of powers of trigonometric functions (I am NOT referring to the reduction formulas here). For each, note one example when you might want to use that formula.

b) Explain how you would evaluate $\int \cos^3 x \, dx$. That is, explain in words the steps you would follow.

c) Show that the two solutions in Example 4 (a) on page 465 are equivalent.

Remember parts 2-4 on the salmon handout! **Reread the directions for these parts to be sure that you are answering the questions.** If you have lost your salmon handout, there is a link on our website to the Homework Guidelines.