## Homework 7

## Due February 24

Be sure to write your name and section on your homework. Please staple all pages together.

Do the following problems from the textbook:
Section 7.2 6, 14, 16, 22, 29, 56
Hint: Some of these may require integration by parts or u-substitution.
Section 7.3 1, 8, 13, 14, 22
Hint: $\int \csc ^{2}(x) d x=-\cot (x)+c$
Hint: For finding $\int \sec ^{3}(x) d x$, see the end of section 7.2 in your textbook.

Also do the following problem:
Area of a Circle: Show that the area of a circle of radius $r$ is $\pi r^{2}$ using trig substitution.

Extra Credit: 7.2.32 and 7.2.47

