

Homework due **Friday, September 10.**

- §8.1 #46

- §8.2 #12

(a) Evaluate the integral using the usual half-angle formulas:

$$\sin^2 x = \frac{1 - \cos 2x}{2} \qquad \cos^2 x = \frac{1 + \cos 2x}{2}.$$

Use example 4 on page 378 as a model.

(b) Evaluate the same integral, but start by using the half-angle formula

$$\sin x \cos x = \frac{\sin 2x}{2}.$$

(c) Show that the two answers are equal.

- §8.3 #8, 18, 29.

- Extra credit: §8.1 #68. You should not give the same proof that she gave in class, i.e., you should not multiply and divide by $\sec x + \tan x$. The symbol \tan should not appear in your answer.

Reading due **Sunday, September 12.**

- §8.4, 9.3, 9.4