Homework: pg 407 #1-3ace, 5, 7, 8, 9, 10, 11, 12a, 13ab, (17a)

**Double Angle Formulas**

Recall the compound angle formulas:







Also note that the Pythagorean Identity can be rearranged as follows:







Activity 1

The compound angle formulas can be used to create double angle formulas by expanding the following:

a) 

b) 

c) 

Example 1

Simplify the following:

a)  b) 

Example 2

Use the double angle formulas to evaluate the following:

a)  b) 

Example 3

If  and , determine the values of  and .