**Math 30-1 Sum, Difference, and Double Angle Identities**

1. Write each expression as a single trigonometric function. (Use the identities.)

a) sin 28° cos 35°  cos 28° sin 35° b) 

c)  d) 

1. Determine an exact value for each expression using a sum or difference identity.

a)  b) 

c) sin (π  A) d) cos (270°  A)

e) tan 15° f) 

1. Evaluate each of the following using *exact values*.

a)  b) 

1. Given  where  is in Quadrant II, evaluate 
2. If A and B are both in quadrant I, and sin A   and cos B  , evaluate each of the following.

a) tan 2A b) tan (A  B)

1. Given  and , where both A and B are in Quadrant II, evaluate

a)  b) 

1. If cos A  , and A is in quadrant IV, find the exact value of sin 2A.
2. Prove that 