**Review 5.1-5.3 Precalculus/Trig Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period \_\_\_\_\_**

1) Let  and . Find the values of each of the following.

A)  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B)  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Simplify by factoring *and* using fundamental identities to simplify this expression to only one trig function: 

3) **Factor** each expression. Do not use trig identities.

A) = B) =

4) Use trigonometric substitution to write the algebraic expression as a trigonometric function of , where . Use 



5) Verify the identities below algebraically in the vertical format.

A)  B) 

C)  D) 

Solve each trig equation.

6)  7) 

Solve each trig equation.

8)  9) 

10) 

Give the values of x in the interval .

11)  12) 