**Precalculus Unit 6 Notes—Sum and Difference Formulas**







**Example 1 Use sum and difference formulas to simplify each expression.**

A.sin 22 cos 13 cos 22 sin 13 B. cos ( cos (/4) – sin (sin (

**Example 2 Prove each identity:**

A.cos (/2 – x) = sin *x* B. sin (/2 – x) = cos *x*

 C. sin ( *x* + ) = –sin *x* D. ****

**Example 3 Find the EXACT value of each expression.**

 A. 

 B. 

 C. 

 D. 

 E. 

**Example 4** Find the value of if  ,  ,  , 

**Example 5** Find the value of if  ,  ,  , 