Math 4 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4-7 Sum and Difference Formulas for Sine and Tangent** Date\_\_\_\_\_\_\_\_

*I can, without a calculator, use trigonometric identities such as angle addition/subtraction and double*

*angle formulas, to express values of trigonometric functions in terms of rational numbers and radicals.*



**Recall:**



**But wait, there’s more…. The cosine sum formulas can be used to derive ones for sine.**



**And the sine and cosine sum formulas can be used to derive ones for tangent.**



**Now you try. Find the exact values for the following.**

**1.** ****

**2. **

**3. 4. **



**5. Given:**

** Find: **

**(Hint: draw triangles and use Pythagorean Theorem!)**