**Pre Calc WS #7.2**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write each expression in terms of the cosine and sine of one angle.**

1. cos 85 cos 30 + sin 85 sin 30
2. 
3. sin 105cos 85 - cos 105 sin 85
4. sin 100 cos 12+ cos 100 sin 12
5. 

**Use the sum or difference identity for the cosine or sine to find the exact value of each trigonometric function. Show all your work. No work no credit.**

1. sin 375 7.) sin 255

8.) cos 195 9.) 

10.) sin 11.) tan 

1. ) Find the exact value of cos ( + ) if  270< < 360, and 180< < 270.
2. Find the exact value of cos ( - ) if  180< < 270, and 90< < 180.

14.) Find the exact value of sin ( - ) if  270< < 360, and 0< < 90.

15.) Find the exact value of sin ( + ) if  270< < 360, and 180< < 270.

16.) Prove: 

17.) Prove: 

18.) Prove: 

**Write each expression in terms of the cosine and sine of one angle.**

1. cos 85 cos 30  sin 85 sin 30
2. 
3. sin 65cos 95 + cos 65 sin 95
4. sin 42 cos 12 cos 42 sin 12
5. 

**Use the sum or difference identity for the cosine, sine, or tangent to find the exact value of each trigonometric function. Show all your work. No work no credit.**

1. sin 105
2. sin 285
3. tan 195
4. 
5. tan
6. sin 
7. Find the exact value of sin ( + ) if  180< < 270, and 270< < 360.
8. Find the exact value of sin ( - ) if  90< < 180, and 270< < 360.
9. Find the exact value of cos ( - ) if  0< < 90, and 90< < 180.
10. Find the exact value of cos ( + ) if  180< < 270, and 90< < 180.
11. Prove: 

35.) Prove: 

1. Prove: 