**Honors Math 3: Verifying Trigonometric Identities Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Verify the identity.***

1. sin csc = 1 2. tan cot = 1

3. (1 + sin )(1 – sin ) = cos2 x 4. cot2 (sec2 – 1) = 1

5. cos2 - sin2 = 1 - 2 sin2 6. cos2 - sin2 = 2 cos2 – 1

7. tan2 + 4 = sec2 + 3 8. 2 - sec2 = 1 – tan2

9. sin2 – sin4 = cos2 – cos4 10. cos + sin tan = sec

11. 12.

13. 14.

15. 16.

17. csc – sin = cos cot 18. sec – cos = sin tan

19. cos + sin tan = sec 20.

21. 22.

23. 24.