Practice Quiz Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Trig Identities Period\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_

I. Fill in the blank to illustrate your knowledge of trigonometric identities.

1. Using even/odd sin(−x) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. sin(a + b) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Using cofunctions csc = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Write a Pythagorean Identity that involves a tangent.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

II. Evaluate each of the following expressions and simplify completely.

5. 2∙cos(x + 60°) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. tan 75° = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. sec(Tan-1 2) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9.  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. sin 195° + cos 15° = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. 4∙cos θ - 4sin θ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. sec(90° − csc-1 3) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Prove the identity: 2sec2 x – 2sec2 x ∙ sin2 x – sin2 x – cos2 x = 1

14. Solve this equation for x if 0 < x < 360° sin x ∙ cos 52° + cos x ∙ sin 52° = ½ .

IV. If A terminates in quadrant III and tan A = ¾, and it B terminates in quadrant IV and cos IV = 5/13, evaluate the following:

15. sin(A – B) =

16. sin (B/2) =

17. cos (2A) =