

PreAP Precalculus
WS – Using Identities to Simply Expressions v2
Spring 2019

Name _____

Date _____ Per _____

Express the following in terms of a **single** trigonometric function.

1. $\sec x \csc x - \tan x$

2. $\csc x - \cos x \cot x$

3. $\frac{1 + \tan^2 x}{\csc x \sec x}$

4. $\frac{\sin x + \tan x}{1 + \sec x}$

5. $\csc x(\sec x - \cos x)$

6. $\frac{\sec x + \csc x}{1 + \tan x}$

7. $\frac{\cot^2 x}{\csc x + 1} + 1$

8. $\frac{1 + \sec x}{\tan x} + \frac{\tan x}{1 + \sec x}$

9. $\frac{\sec x - 1}{1 - \cos x}$

10. $\sec x(\csc x - \cot x \cos x)$

11. $\frac{\cos x}{1 - \sin x} - \frac{\cos x}{1 + \sin x}$

12. $\frac{\tan x + \cot x}{\sec^2 x}$

13. $\frac{1 + \cot x}{\sin x + \cos x}$

14. $\frac{\sec x + 1}{\sin^2 x \sec x}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____