

Name _____

Date _____ Block _____

Verifying Trig Identities

1)
$$\frac{\cos^2 x}{\csc x} = \frac{\sin x}{\sec^2 x}$$

2)
$$\frac{\tan x + 1}{\sec x} = \cos x + \sin x$$

3)
$$\frac{1}{\tan^2 x \cot x} = \cot^2 x \tan x$$

4)
$$\frac{\sec x + 1}{\sec x} = 1 + \cos x$$

5)
$$\frac{\csc x}{\sec^2 x \cot x} = \cos x$$

6)
$$-\csc x \cos x = -\cot x$$

7)
$$\frac{\csc^2 x}{\tan^2 x} = \frac{\cot^2 x}{\sin^2 x}$$

8)
$$\frac{\csc x - \cot^2 x}{\csc^2 x} = \sin x - \cos^2 x$$

9)
$$\csc^2 x + \sec^2 x = \frac{\csc^2 x}{\cos^2 x}$$

10)
$$\frac{\csc^2 x - 1}{\cos x} = \frac{\sec x}{\tan^2 x}$$