Verify each equation.

1. $\sec x - \tan x \sin x = \dfrac{1}{\sec x}$

2. $\dfrac{1 + \cos x}{\sin x} = \csc x + \cot x$

3. $\cos^2 x - \sin^2 x = 1 - 2\sin^2 x$

4. $\dfrac{\sec^2 x}{\sec^2 x - 1} = \csc^2 x$

5. $\tan^2 x \sin^2 x = \tan^2 x - \sin^2 x$

6. $\dfrac{\tan x - 1}{\tan x + 1} = \dfrac{1 - \cot x}{1 + \cot x}$

7. $\dfrac{1 - \tan^2 x}{1 + \tan^2 x} = 1 - 2\sin^2 x$

8. $\dfrac{\cos x + 1}{\sin^3 x} = \dfrac{\csc x}{1 - \cos x}$

9. $\csc^4 x - \cot^4 x = \csc^2 x + \cot^2 x$

10. $\dfrac{\tan x}{\sec x} + \dfrac{\cot x}{\csc x} = \sin x + \cos x$