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Hint 18: Sub in 1

Verify that each equation is an identity.

13. $\tan A = \frac{\sec A}{\csc A}$

15. $\sec x - \tan x = \frac{1 - \sin x}{\cos x}$

17. $\sec x \csc x = \tan x + \cot x$

23. $\csc x - 1 = \frac{\cot^2 x}{\csc x + 1}$

25. $\sin \theta \cos \theta \tan \theta + \cos^2 \theta = 1$

14. $\cos \theta = \sin \theta \cot \theta$

16. $\frac{1 + \tan x}{\sin x + \cos x} = \sec x$

18. $\sin \theta + \cos \theta = \frac{2 \sin^2 \theta - 1}{\sin \theta - \cos \theta}$

20. $(\sin \theta - 1)(\tan \theta + \sec \theta) = -\cos \theta$

24. $\cos B \cot B = \csc B - \sin B$

26. $(\csc x - \cot x)^2 = \frac{1 - \cos x}{1 + \cos x}$