

5.1-5.3 Assignment

Verify each identity. Please make sure to show all of your steps so I am not stuck wondering how you got from one piece to another. I do not want you to loose points!! 😊

1. $\cos(x) + \sin(x) \tan(x) = \sec(x)$

2. $\frac{1}{\sec(x) \tan(x)} = \csc(x) - \sin(x)$

3. $\frac{1+\sin(x)}{\cos(x)} + \frac{\cos(x)}{1+\sin(x)} = 2 \sec(x)$

4. $\frac{\sec x \sin x}{\tan x + \cot x} = \sin^2 x$

Find the solutions on the interval $[0, 2\pi)$.

5. $4 \cos^2(x) - 1 = 0$

6. $2 \sin^2(x) - \sin(x) - 1 = 0$

7. $\sec^2(x) - \sec(x) = 2$

8. $2 \cos^2(4x) - 1 = 0$