

PRECALCULUS
5.3 Worksheet #2

Name_____

Period_____

Solve:

1. $2 \cos 2x - 1 = 0 \quad (0, 2\pi]$

2. $2 \cos^2\left(\frac{x}{2}\right) - 1 = 0$

3. $3 \tan^2 x - 1 = 0 \quad (0, 2\pi]$

4. $2 \sin^2 x - \sin x - 1 = 0$

5. $\sec^4 x - 4 \sec^2 x = 0 \quad (0, 2\pi]$

6. $2 \cos^2\left(\frac{x}{2}\right) + \cos\left(\frac{x}{2}\right) = 0$

7. $\sec x \csc x - 2 \csc x = 0 \quad (0, 2\pi]$

8. $4 \sin^3 x + 2 \sin^2 x - 2 \sin x - 1 = 0 \quad (0, 2\pi]$

Hint: Factor by grouping

9. $2 \sin x - \csc x = 0$

10. $\frac{1 + \cos x}{1 - \cos x} = 0 \quad (0, 2\pi]$