

Math 130**Section 7.5**

Solve the equations:

1. $\tan^2 \theta - 2 \sec \theta = 2$

2. $\cos 2\theta = 3 \sin \theta - 1$

3. $2 \tan \theta + \sec^2 \theta = 4$

4. $3 \tan^3 \theta - 3 \tan^2 \theta - \tan \theta + 1 = 0$

$$5. \cos \theta \cos 3\theta - \sin \theta \sin 3\theta = 0$$

$$6. \cos 2\theta + \cos \theta = 2$$

$$7. \cos \theta - \sin \theta = \sqrt{2} \sin\left(\frac{\theta}{2}\right)$$