

Solving Trigonometric Equations Using Identities

Name _____

Date _____ Period _____

Solve the following equations for θ on $[0, 2\pi)$

$$\cos^2 \theta + \sin \theta + 1 = 0$$

Solve the following equations for θ on $[0, 2\pi)$

$$\cos(2\theta) - 3\sin \theta + 1 = 0$$

Solve the following equations for θ on $[0, 2\pi)$

$$\cos(2\theta) + 5\cos\theta + 3 = 0$$

Solve the following equations for θ on $[0, 2\pi)$

$$\sin(2\theta) = \cos\theta$$

Solve the following equations for θ on $[0, 2\pi)$

$$\sin(2\theta) \sin \theta - \cos \theta = 0$$

Solve the following equations for θ on $[0, 2\pi)$

$$2 \cot^2(2\theta) - 3 \csc(2\theta) + 3 = 0$$

Solve the following equations for θ on $[0, 2\pi)$

$$\sin \theta + \cos \theta = 1$$