

Section 4-4 Solving Trig Equations

Solve the equation in the given domain.

1. $2\cos\theta + \sqrt{3} = 0$ $\theta \in [0^\circ, 720^\circ]$

2. $\tan(\theta - 81^\circ) = 1$ $\theta \in [-180^\circ, 540^\circ]$

3. $10 \sin(x - 0.2) = -3$ for x in the domain $[0, 4\pi]$

4. $5\sin \pi x = 2$ $x \in [-2, 4]$

5. $\cos^2 \theta + \sin \theta + 1 = 0$ $\theta \in [-90^\circ, 270^\circ)$

6. $37\sin \theta + 31 = 10 \cos^2 \theta$ $\theta \in [0^\circ, 720]$