

Solving Trig Equations

Practice

Name _____

1. $\tan\theta + \sqrt{3} = 0 \quad 0 \leq \theta < 2\pi$	2. $2\sin(\theta + 47^\circ) = 1 \quad 0^\circ \leq \theta < 360^\circ$
3. $4\cos^2\theta = 1 \quad 0 \leq \theta < 2\pi$	4. $2\sin\theta\cos\theta = \sqrt{2}\cos\theta$ for all values of θ
5. $\tan\theta - \sqrt{3} = 2\tan\theta$ for all values of θ	6. $2\sin^2\theta + \sin\theta = 0 \quad 0 \leq \theta < 2\pi$
7. $2\cos^2\theta - 5\cos\theta + 2 = 0 \quad 0 \leq \theta < 2\pi$	8. $\sin^2\theta + 5\sin\theta + 6 = 0 \quad 0 \leq \theta < 2\pi$
9. $\tan^2\theta - \sec\theta - 1 = 0$ for all values of θ	10. $1 - \cos\theta = -\sin\theta \quad 0 \leq \theta < 2\pi$
11. $4\sin\theta\cos\theta = \sqrt{3} \quad 0 \leq \theta < 2\pi$	12. $\frac{\sin(90^\circ - \theta)}{\sin\theta} = -\sqrt{3} \quad 0^\circ \leq \theta < 360^\circ$
13. $\sin 2\theta \cos 64^\circ + \cos 2\theta \sin 64^\circ = \frac{\sqrt{3}}{2} \quad 0^\circ \leq \theta < 360^\circ$	14. $5\sec^2\theta + 2\tan\theta - 8 = 0 \quad 0^\circ \leq \theta < 360^\circ$
15. $\sin^2\theta + \sin\theta - 1 = 0 \quad 0 \leq \theta < 2\pi$	16. $\cos 3\theta = \frac{1}{2} \quad 0 \leq \theta < 2\pi$

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