

Solving Trig Equations: Review

Solve. Give answers between 0 and 360 degrees

$$1. \quad 2\cos\theta + 1 = 0$$

$$2. \quad \sqrt{3}\csc\theta - 2 = 0$$

$$3. \quad 3\sec^2\theta - 4 = 0$$

$$4. \quad 2\sin^2(2\theta) = 1$$

$$5. \quad 4\sin^2\theta - 3 = 0$$

$$6. \quad \sin^2\theta = 3\cos^2\theta$$

$$8. \quad \cos 2\theta(2\cos\theta + 1)$$

$$9. \quad 3\tan^3\theta = \tan\theta$$

$$10. \quad \sec^2\theta - \sec\theta = 2$$

$$13. \quad \cos\left(\frac{\theta}{2}\right) = \frac{\sqrt{2}}{2}$$

$$14. \quad 2\sin^2\theta + 3\sin\theta + 1 = 0$$

Solve. Give answers between 0 and 360 degrees

$$1. \tan \theta = 1$$

$$2. \tan \theta = 0$$

$$3. \sin \theta = \frac{\sqrt{3}}{2}$$

$$4. \cos \theta = 0$$

$$5. \sin(\theta) = \frac{\sqrt{2}}{2}$$

$$6. \cos(\theta) = -1$$

$$7. \cos \theta = .365$$

$$8. \sin(\theta) = .4$$

$$9. \cos \theta = -.653$$

$$10. \sin(\theta) = -.2$$

Solve. Give answers between 0 and 360 degrees

$$1. \tan \theta = 1$$

$$2. \tan \theta = 0$$

$$3. \sin 2\theta = \frac{\sqrt{3}}{2}$$

$$4. \cos 3\theta = 0$$

$$5. \sin\left(\frac{\theta}{3}\right) = \frac{\sqrt{2}}{2}$$

$$6. \cos\left(\frac{\theta}{2}\right) = -1$$

$$7. \cos\left(\theta + \frac{\pi}{9}\right) = \frac{\sqrt{3}}{2}$$

$$8. \sin\left(\theta + \frac{\pi}{6}\right) = -\frac{\sqrt{2}}{2}$$

$$9. \cos \theta = .25$$

$$10. \sin(\theta) = -.4$$

Solve. Give answers between 0 and 360 degrees

$$1. \quad 2\cos\theta + 1 = 0$$

$$2. \quad \sqrt{3}\csc\theta - 2 = 0$$

$$3. \quad 3\sec^2\theta - 4 = 0$$

$$4. \quad 2\sin^2(2\theta) = 1$$

$$5. \quad 4\sin^2\theta - 3 = 0$$

$$6. \quad \sin^2\theta = 3\cos^2\theta$$

$$8. \quad \cos 2\theta(2\cos\theta + 1)$$

$$9. \quad 3\tan^3\theta = \tan\theta$$

$$10. \quad \sec^2\theta - \sec\theta = 2$$

$$13. \quad \cos\left(\frac{\theta}{2}\right) = \frac{\sqrt{2}}{2}$$

$$14. \quad 2\sin^2\theta + 3\sin\theta + 1 = 0$$

Solve. Give answers between 0 and 360 degrees

$$1. \tan \theta = 1$$

$$2. \tan \theta = 0$$

$$3. \sin 2\theta = \frac{\sqrt{3}}{2}$$

$$4. \cos 3\theta = 0$$

$$5. \sin\left(\frac{\theta}{3}\right) = \frac{\sqrt{2}}{2}$$

$$6. \cos\left(\frac{\theta}{2}\right) = -1$$

$$7. \cos\left(\theta + \frac{\pi}{9}\right) = \frac{\sqrt{3}}{2}$$

$$8. \sin\left(\theta + \frac{\pi}{6}\right) = -\frac{\sqrt{2}}{2}$$

$$9. \cos \theta = .25$$

$$10. \sin(\theta) = -.4$$