

Name _____
Mr. Schlansky

Date _____
Algebra II

Double Angle Trig Equations

Solve the following equations to the nearest degree in the interval $0^\circ \leq \theta < 360^\circ$.

1. $3 \cos \theta + \sin 2\theta = 0$

2. $\sin 2\theta + \sqrt{2} \cos \theta = 0$

3. $\sin 2\theta + \sin \theta = 0$

4. $\sin 2\theta = \sin \theta$

5. $\cos \theta = 2 + 3 \cos 2\theta$

6. $3 \cos 2\theta + 2 \sin \theta = -1$

7. $\cos 2\theta + \cos \theta = -1$

8. $\cos 2\theta + 3 \cos \theta + 2 = 0$

$$9. 3 \cos 2\theta = \cos \theta + 2$$

$$10. \cos 2\theta - \cos \theta = 0$$

$$11. 3 \cos 2\theta + 5 = -8 \sin \theta$$

$$12. 3 \cos 2\theta + 5 \cos \theta = -2$$