

Worksheet 2—Review of Simple Trig Equations

Name: _____

Date: _____ Period: _____

Solve each equation of $0 \leq \theta < 2\pi$

1. $\sqrt{3} = \tan \theta$

6. $4 + \csc \theta = 6$

2. $0 = \sin \theta$

7. $-2 \cos \theta = 2\sqrt{3}$

3. $\sqrt{2} = \csc \theta$

8. $-3 \csc \theta = -3$

4. $-\frac{1}{2} = \cos \theta$

9. $-3 + \frac{1}{2} \sin \theta = -\frac{11}{4}$

5. $2 \tan^2 \theta = 2$

10. $5 + 4 \tan \theta = 9$

$$11. \frac{5}{3} = 2 - \frac{1}{3} \cot \theta$$

$$16. 1 + 3 \sin \theta = 3\sqrt{2} + 1$$

$$12. 12 \sin^2 \theta - 3 = 0$$

$$17. 4 \sin \theta = 2 \sin \theta + \sqrt{2}$$

$$13. -1 + 8 \sin \theta = -4\sqrt{3} - 1$$

$$18. 3 \cot^2 \theta + 4 = 7$$

$$14. -1 + \sec \theta = 5 - 2 \sec \theta$$

$$19. 4 \cos^2 \theta + 2 \cos \theta - 2\sqrt{2} \cos \theta = \sqrt{2}$$

$$15. 5 + \frac{5}{2} \sec \theta = 4 + 2 \sec \theta$$

$$20. \frac{\tan^2 \theta}{\sec \theta} + \cos \theta = 2$$