

Pre-Calculus/Trig3
7.3 Trig Equations Wkst

Name _____
Block _____ Date _____

Solve for the principal values ($0 \leq x < 2\pi$) of θ .

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

2. $5\sin\theta - 1 = 0$

3. $\tan^2\theta - 16 = 0$

4. $2\cos^2\theta - 3\cos\theta + 1 = 0$

5. $8\sin^2\theta - 2\sin\theta - 1 = 0$

6. $3\tan^4\theta - 10\tan^2\theta + 3 = 0$

7. $\tan^2\theta + 5\tan\theta + 6 = 0$

8. $\csc^2\theta - 6\csc\theta = 0$

9. $\sec^2\theta + \sec\theta - 2 = 0$

10. $4\cos^4\theta - 5\cos^2\theta + 1 = 0$

11. $\cos\theta = 1 + 2\sec\theta$

12. $\sin\theta - \cos^2\theta\sin\theta = -1$

13. $\sec\theta = \sin^2\theta\sec\theta$

14. $\sin^2\theta - \tan\theta\cos^2\theta = 0$

15. $2\sin\theta - 3\csc\theta + 5 = 0$

16. $\sin\theta + 2\csc\theta = 3$

17. $\tan^2\theta - 3 = 0$

18. $2\cos^2\theta + \sin\theta - 1 = 0$

19. $2\sin^2\theta - 3\sin\theta + 1 = 0$

20. $2\cos\theta\sin\theta = \cos\theta$

21. $\cos\theta = 1 + \sin\theta$

22. $2\sin^2\theta + \sin\theta = 0$

23. $\tan^2\theta\sin\theta = -\sin\theta$

24. $\tan^2\theta = 3\tan\theta$

25. $\sin\theta + \sin\theta\cot\theta = 0$

26. $\sec\theta + \cos\theta = \tan\theta\sin\theta - 1$

27. $\tan^2\theta - \sec\theta = 1$

28. $4\cos\theta - \sec\theta - 3 = 0$

29. $3\sin^2\theta - \cos^2\theta = 0$

30. $\sin^2\theta = \sin\theta$