

Solve the following equations over $[0, 2\pi)$.

1. $\cot x + 1 = 0$

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

3. $\sin x + 2 = 0$

4. $2\sin x - 1 = 0$

5. $\sin x + \sqrt{2} = -\sin x$

6. $\csc^2 x + 2 = 4$

7. $\tan x + \sqrt{3} = 0$

8. $\sqrt{2}\sin x + 1 = 0$

9. $7 + \cos x = 4 - 5\cos x$

10. $-5 + 2\cos x = -2 + \cos x$

11. $4 + 7\cot x = -2\sqrt{3} + \cot x + 4$

12. $-6 + 3\tan x = \sqrt{3} - 6$

$$13. \tan^2 x - 3 = 0$$

$$14. 3 \tan^2 x - 1 = 0$$

$$15. \tan x(\tan x - 1) = 0$$

$$16. 2 \cos^2 x - \sqrt{3} \cos x = 0$$

$$17. \sin^2 x - \sin x = 2$$

$$18. 1 + \csc^2 x + \csc x = 3$$

$$19. 1 + \tan^2 x + \tan x = 1$$

$$20. 1 - \cos^2 x + \cos x = -1$$

$$21. 2 \sin^2 x - \sin x = 1$$

$$22. 2 - 2 \cos^2 x = 2 + \cos x$$

$$23. \sec^2 x - \sec x = 2$$

$$24. 3 \tan^3 x = \tan x$$