

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. $1 + \sec^2 x + \sec x = 3$

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