Trig Equations

1. $\cos^2 x = 3/4$

2. $\tan(x+1)\cos x = 0$

3. $(2\cos x + 1)\sin x = 0$

4. $2\sin^2 x = \sin x$

5. $(2\cos x + \sqrt{3})(\sec x - 2) = 0$

6. $(\cot^2 x - 3)(\sin x + 1) = 0$

7. $(3\tan^2 x - 1)(4\sin^2 x - 1) = 0$

8. $2\cos^2 x + 3\cos x + 1 = 0$

9. $\tan^2 x = \sec x + 1$

10. $\sqrt{2}\sin x \cos x - \cos x = 0$

11. $\cot^2 x + 2\csc^2 x - 3 = 0$

12. $\sec x + 1 = 2\cos x$

13. $4\sin x + \sqrt{3}\csc x = 2 + 2\sqrt{3}$

14. $\sqrt{1 + \cos^2 x} = \sqrt{2}\cos x$

15. $\cos^2 x = 2\sin^4 x$

16. $\sec x - \tan x = 2\cos x$

17. $\cot^2 x = 1 + \csc x$

18. $5\sin^2 x + 3\sin x - 2 = 0$

19. $5\sin x = 4\tan x$

20. $\csc x + 2\sin x - 4 = 0$

21. $11\cos^2 x + \cos x - 6 = 0$

22. $\tan x - 3\cot x - 1 = 0$

23. $\tan x \sin x + 2\tan x = 2\cos^2 x \tan x$

24. $8\cos^2 x \sin x + 4\cos^2 x = 6\sin x + 3$

25. $\tan^2 x - \sqrt{3}\tan x = 1 - \sqrt{3}\cot x$