

**Solving Trig Equations Review WS**Solve over  $[0, 2\pi)$ .

1. $\tan x = 2\sin x$	2. $1 + \sin x = 2\cos^2 x$
3. $\sin^2 x = 2\cos x + 2$	4. $\tan x = \cot x$
5. $\csc^2 x = \cot x + 1$	6. $\tan^2 x = -\frac{3}{2}\sec x$
7. $\sin x \tan x = -\tan x$	8. $2\sin^2 x = 3\sin x - 1$
9. $2\sin^2 x = \sqrt{3}\sin x$	10. $\cot^2 x + \csc^2 x = 3$
11. $2\cos x \csc x = \sqrt{3}\csc x$	12. $3\cos x + 3 = 2\sin^2 x$

13. $\tan^2 x = \sqrt{3} \tan x$	14. $(\tan x - 1)(\sec x - 1) = 0$
15. $\sec^2 x - 2 \tan x = 0$	16. $(\sin^2 x - 1)(\tan x + 1) = 0$
17. $3 \cos x + \sqrt{2} = \cos x$	18. $(\sec^2 x - 2)(\csc x + 1) = 0$
19. $\cot x(\csc x + 2) = 0$	20. $2 \cos^2 x - 7 \cos x = -3$
21. $6 \sin 2x - 3 = 0$	22. $\tan 3x(\tan x - 1) = 0$
23. $3 \tan^2 2x = 1$	24. $4 \sec 3x + 8 = 0$