

Goniometrické rovnice

Řešte v R rovnice :

1. $2 \cos^2 x - \cos x - 1 = 0$

2. $2 \cos^2 x - 3 = 3 \sin x$

3. $4 \sin^2 x - \operatorname{tg}^2 x = 1$

4. $2 \sin^2 5x + 3 \cos 5x = 0$

5. $2 \sin^2 x - \sin x = 0$

6. $\sin x = \cos x$

7. $\sin^2 x - 6 \cos^2 x + \sin x \cos x = 0$

8. $\sin x + \sin 2x = 0$

9. $1 = (\cos x + \sin x)^2$

10. $\cos 2x + \sin x \cos x = 1$

11. $\cos 2x - \sin 2x = (\sin x + \cos x)^2$

12. $2 \sin\left(x - \frac{\pi}{4}\right) = \sqrt{2}$

13. $\operatorname{tg} x = 2 \sin x$

14. $4 \sin^2 x - 2 \sin x \cos x = 3$

15. $\sin 2x \cos x + \sin^2 x = 1$

16. $\sin x \cos x = \frac{1}{2}$

17. $\cos 2x - 2 = \cos x$

18. $1 - \cos 2x = \sin 2x \cdot \sin x$

19. $\cos \frac{x}{4} - \sin \frac{x}{2} = 0$

20. $\sin \frac{3}{2}x + \sin \frac{x}{2} = 0$

21. $\sin(x + 30^\circ) + \sin(x - 30^\circ) = \frac{\sqrt{3}}{2}$