

Goniometrische Gleichungen

Löse die folgenden goniometrischen Gleichungen (a) im Standardintervall $[0:360[$, (b) im Standardintervall $[0:2\pi[$ (c) über \mathbb{R} (verwende das Gradmaß)!

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|--|--|---|
| 1. $\sin x = 0.88$ | 2. $\tan x = -1.45$ | 3. $\sin x = -0.34$ |
| 4. $\cos x = -0.66$ | 5. $\tan x = 0.98$ | 6. $\cot x = -2.04$ |
| 7. $\cos x = 0.91$ | 8. $\cot x = 1.22$ | 9. $\sin x = 0.26$ |
| 10. $\tan x = 0.21$ | 11. $\sin x = -0.81$ | 12. $\tan x = -2.12$ |
| 13. $\cos x = -0.66$ | 14. $\cot x = -2.71$ | 15. $\cos x = 0.09$ |
| 16. $\cot x = 1.35$ | 17. $\sin 2\varphi = \frac{\sqrt{3}}{2}$ | 18. $\cot 3\varphi = \sqrt{3}$ |
| 19. $\sin 2\varepsilon = 1$ | 20. $\cos 2\varphi = 0$ | 21. $\sin \frac{\varphi}{2} = \frac{\sqrt{3}}{2}$ |
| 22. $\sin^2 \varepsilon = 1$ | 23. $\tan 2\alpha = 1$ | 24. $\tan \frac{\beta}{3} = \frac{1}{\sqrt{3}}$ |
| 25. $\cos 2\alpha = 0,5$ | 26. $\cos \frac{\gamma}{2} = 0$ | 27. $\sin \frac{\varphi}{2} = 1$ |
| 28. $\tan \frac{\alpha}{2} = 1$ | 29. $\tan 2\alpha = 0$ | 30. $\cot 3\varphi = 1$ |
| 31. $\cos \frac{\varphi}{2} = \frac{1}{2}$ | 32. $\cos^2 \alpha = 1$ | 33. $\cot \frac{\beta}{3} = \sqrt{3}$ |
| 34. $\tan^2 \varphi - \frac{1}{3} = 0$ | 35. $\sin \varphi = \cot \varphi$ | 36. $\sin \varphi = \tan \varphi$ |
| 37. $\sin \alpha = -\cot \alpha$ | 38. $\sin \beta = -\tan \beta$ | 39. $\cos \varphi = \tan \varphi$ |
| 40. $\cot \alpha = \cos \alpha$ | 41. $\cos \gamma = -\tan \gamma$ | 42. $\cos \beta = -\cot \beta$ |

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