

TRIGONOMETRIKUS EGYENLETEK

$$1. \sin x = \frac{1}{2} \quad \sin x = \frac{\sqrt{3}}{2} \quad \sin x = \frac{\sqrt{2}}{2} \quad \sin x = 1 \quad \sin x = 0 \quad \sin x = -\frac{1}{2} \quad \sin x = -\frac{\sqrt{3}}{2}$$

$$\sin x = -\frac{\sqrt{2}}{2} \quad \sin x = -1$$

$$2. \cos x = \frac{1}{2} \quad \cos x = \frac{\sqrt{3}}{2} \quad \cos x = \frac{\sqrt{2}}{2} \quad \cos x = 1 \quad \cos x = 0 \quad \cos x = -\frac{1}{2} \quad \cos x = -\frac{\sqrt{3}}{2}$$

$$\cos x = -\frac{\sqrt{2}}{2} \quad \cos x = -1$$

$$3. \sin x = 0,2 \quad \sin x = 0,4 \quad \sin x = 0,6 \quad \sin x = 0,8 \quad \sin x = -0,1$$

$$\sin x = -0,3 \quad \sin x = -0,7 \quad \sin x = -0,9$$

$$4. \cos x = 0,1 \quad \cos x = 0,3 \quad \cos x = 0,7 \quad \cos x = 0,9 \quad \cos x = -0,2$$

$$\cos x = -0,4 \quad \cos x = -0,6 \quad \cos x = -0,8$$

$$5. \sin\left(x - \frac{\pi}{6}\right) = \frac{1}{2} \quad \sin\left(2x + \frac{\pi}{3}\right) = \frac{\sqrt{3}}{2} \quad \sin\left(3x - \frac{\pi}{4}\right) = \frac{\sqrt{2}}{2} \quad \sin\left(4x + \frac{\pi}{2}\right) = 1$$

$$\sin\left(3x - \frac{\pi}{3}\right) = -\frac{\sqrt{3}}{2} \quad \sin(2x + \pi) = -\frac{\sqrt{2}}{2} \quad \sin\left(x - \frac{\pi}{2}\right) = -\frac{1}{2}$$

$$\sin\left(4x - \frac{\pi}{2}\right) = 0$$

$$6. \cos\left(x - \frac{\pi}{3}\right) = \frac{1}{2} \quad \cos\left(2x + \frac{\pi}{6}\right) = \frac{\sqrt{3}}{2} \quad \cos(3x - \pi) = \frac{\sqrt{2}}{2} \quad \cos\left(4x + \frac{\pi}{2}\right) = 0$$

$$\cos\left(3x - \frac{\pi}{2}\right) = -\frac{\sqrt{3}}{2} \quad \cos\left(2x + \frac{\pi}{4}\right) = -\frac{\sqrt{2}}{2} \quad \cos\left(x - \frac{\pi}{2}\right) = -1$$

$$7. \sin(2x + \pi) = \sin\left(x - \frac{\pi}{2}\right) \quad \sin\left(3x + \frac{\pi}{4}\right) = \sin\left(2x - \frac{\pi}{3}\right)$$

$$8. \sin\left(2x - \frac{\pi}{2}\right) = \sin\left(4x + \frac{\pi}{3}\right) \quad \sin\left(x - \frac{\pi}{3}\right) = \sin\left(2x + \frac{\pi}{4}\right)$$

$$9. \cos\left(5x + \frac{\pi}{3}\right) = \cos\left(3x - \frac{\pi}{4}\right) \quad \cos\left(x - \frac{\pi}{2}\right) = \cos(3x + \pi)$$

$$10. \cos(x - \pi) = \cos\left(3x + \frac{\pi}{3}\right) \quad \cos\left(4x + \frac{\pi}{2}\right) = \cos(2x)$$

$$11. \cos\left(3x + \frac{\pi}{4}\right) = \cos\left(\frac{3\pi}{4} - x\right)$$

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

$$13. \sin\left(\pi x + \frac{\pi}{2}\right) = \cos \pi x \quad \sin(2x - \pi) = \cos\left(x + \frac{\pi}{4}\right) \quad \cos(4x) = \sin\left(2x + \frac{\pi}{3}\right)$$

$$14. \sin\left(2x + \frac{\pi}{3}\right) = \cos\left(3x - \frac{\pi}{4}\right) \quad \cos\left(3x + \frac{\pi}{4}\right) = \sin\left(2x + \frac{\pi}{3}\right)$$

$$15. |\sin x| = \frac{1}{2} \quad |\sin x| = \frac{\sqrt{3}}{2} \quad |\sin x| = \frac{\sqrt{2}}{2} \quad |\sin x| = 1 \quad |\cos x| = \frac{1}{2} \quad |\cos x| = \frac{\sqrt{3}}{2}$$

$$|\cos x| = \frac{\sqrt{2}}{2}$$

$$16. |\cos x| = 1 \quad |\operatorname{tg} x| = 1$$

$$17. \sin x \cdot \left(\cos x - \frac{\sqrt{3}}{2}\right) = 0 \quad \cos x \cdot \left(\cos x - \frac{\sqrt{2}}{2}\right) = 0 \quad \cos x \cdot \left(\sin x - \frac{1}{2}\right) = 0 \quad \sin x \cdot (\sin x - 1) = 0$$

$$18. \sin^2 x = 1 \quad \sin^2 x = \frac{3}{4} \quad \sin^2 x = \frac{1}{2} \quad \cos^2 x = 1 \quad \cos^2 x = \frac{3}{4} \quad \cos^2 x = \frac{1}{2} \\ \operatorname{tg}^2 x = 1$$

$$19. \sin^2 x - \frac{3}{2}\sin x + \frac{1}{2} = 0 \quad \sin^2 x + \sin x = 0 \quad \sin^2 x - \sin x + 2 = 0 \\ \cos^2 x + \frac{7}{2}\cos x - 2 = 0$$

$$20. \cos^2 x + \frac{1}{2}\cos x = 0 \quad \cos^2 x - \frac{1}{4} = 0 \quad \cos^2 x - \frac{1}{2} = 0 \quad \operatorname{tg}^2 x + \operatorname{tg} x = 0$$

$$21. 2 \sin^2 x = 3 \sin x - 1$$

$$22. \sin^2 x + \sin x = 0$$

$$23. \sin^2 x - 2 = \sin x$$

$$24. 2 \cos^2 x + 7 \cos x - 4 = 0$$

$$25. 2 \cos^2 x - \cos x - 1 = 0$$

$$26. \sin^2 x = 2 \cos x - 2$$

$$27. 2 \cos^2 x + \sin x = 1$$

$$28. 2 \sin^2 x = 3 \cos x$$

$$29. \cos^2 x + \sin x + 1 = 0$$

$$30. \sin^2 x = 3 \cos x + 2$$

$$31. 2 \sin^2 x = 2 - \cos x$$

$$32. 2 \cos^2 x \sin x + 3 \sin^2 x = 0$$

$$33. 2 \sin^3 x + \sin x \cos x + \sin x = 0$$

$$34. \operatorname{ctg} x + \frac{\sin x}{1 + \cos x} = 2$$

$$35. \cos x = \frac{1}{2} \operatorname{ctg} x$$

$$36. \frac{1}{\sin^2 x} = 1 + \operatorname{tg}^2 x$$

$$37. 8 \cos x + 6 \operatorname{tg} x = \frac{3}{\cos x}$$

$$38. \frac{2}{\sin x} + \sqrt{3} \operatorname{ctg} x = 2 \sin x$$

$$39. 3 \cos 2x - 8 \cos^2 x + 3 \sin x + 6 = 0$$

$$40. 8 \sin^2 x - 2 \cos 2x = 7$$

$$41. \sin 2x + \cos x = \operatorname{ctg} x$$

$$42. 2 \cos 2x + 2 \sin^2 x + \sin 2x = 0$$

$$43. \sin 2x + \cos x = \operatorname{ctg} x$$

$$44. \sin 2x + \sin x = \operatorname{tg} x, x \in \left[\frac{\pi}{2}, \frac{3\pi}{2} \right]$$

$$45. 3 \cos 2x - 8 \cos^2 x + \sin x - 2 = 0$$

$$46. 5 \sin 2x + 7 \cos x = 3 \operatorname{ctg} x, x \in [\pi; 2\pi]$$

$$47. \cos 2x + \sin 2x = \cos^2 x$$

$$48. 2 \cos x \cos 2x = \cos x$$

$$49. 5 \sin 2x + 7 \cos x = 3 \operatorname{ctg} x$$

$$50. 6 \cos^3 x + 2 \cos x = \sin 2x$$

$$51. 8 \sin^2 x - 2 \cos 2x = 7$$

$$52. \sin x + \sqrt{3} \cos x = 1$$

$$53. \sin x + \sqrt{3} \cos x = -1$$

$$54. \sin x + \sqrt{3} \cos x = 0$$

$$55. \sin x + \sqrt{3} \cos x = \sqrt{2}$$

$$56. \sin x + \sqrt{3} \cos x = -\sqrt{2}$$

$$57. \sin x + \sqrt{3} \cos x = \sqrt{3}$$

$$58. \sin x + \sqrt{3} \cos x = -\sqrt{3}$$

$$59. \sin x - \sqrt{3} \cos x = 1$$

$$60. \sin x - \sqrt{3} \cos x = -1$$

$$61. \sin x - \sqrt{3} \cos x = 0$$

$$62. \sin x - \sqrt{3} \cos x = \sqrt{2}$$

$$63. \sin x - \sqrt{3} \cos x = -\sqrt{2}$$

$$64. \sin x - \sqrt{3} \cos x = \sqrt{3}$$

$$65. \sin x - \sqrt{3} \cos x = -\sqrt{3}$$

$$66. \sqrt{3} \sin x + \cos x = 1$$

$$67. \sqrt{3} \sin x + \cos x = -1$$

$$68. \sqrt{3} \sin x + \cos x = 0$$

$$69. \sqrt{3} \sin x + \cos x = \sqrt{2}$$

$$70. \sqrt{3} \sin x + \cos x = -\sqrt{2}$$

$$71. \sqrt{3} \sin x + \cos x = \sqrt{3}$$

$$72. \sqrt{3} \sin x + \cos x = -\sqrt{3}$$

$$73. \sqrt{3} \sin x - \cos x = 1$$

$$74. \sqrt{3} \sin x - \cos x = -1$$

$$75. \sqrt{3} \sin x - \cos x = 0$$

$$76. \sqrt{3} \sin x - \cos x = \sqrt{2}$$

$$77. \sqrt{3} \sin x - \cos x = -\sqrt{2}$$

$$78. \sqrt{3} \sin x - \cos x = \sqrt{3}$$

$$79. \sqrt{3} \sin x - \cos x = -\sqrt{3}$$

$$80. \sin x + \cos x = 1$$

$$81. \sin x + \cos x = -1$$

$$82. \sin x + \cos x = 0$$

$$83. \sin x + \cos x = \sqrt{2}$$

$$84. \sin x + \cos x = -\sqrt{2}$$

$$85. \sin x + \cos x = \sqrt{3}$$

$$86. \sin x + \cos x = -\sqrt{3}$$

$$87. \sin x - \cos x = 1$$

$$88. \sin x - \cos x = -1$$

$$89. \sin x - \cos x = 0$$

$$90. \sin x - \cos x = \sqrt{2}$$

$$91. \sin x - \cos x = -\sqrt{2}$$

$$92. \sin x - \cos x = \sqrt{3}$$

$$93. \sin x - \cos x = -\sqrt{3}$$

$$94. \sqrt{3}\sin x + 3\cos x = \sqrt{3}$$

$$95. \sqrt{3}\sin x + 3\cos x = -\sqrt{3}$$

$$96. \sqrt{3}\sin x + 3\cos x = 0$$

$$97. \sqrt{3}\sin x + 3\cos x = \sqrt{6}$$

$$98. \sqrt{3}\sin x + 3\cos x = -\sqrt{6}$$

$$99. \sqrt{3}\sin x + 3\cos x = 3$$

$$100. \sqrt{3}\sin x + 3\cos x = -3$$

$$101. \sqrt{3}\sin x - 3\cos x = \sqrt{3}$$

$$102. \sqrt{3}\sin x - 3\cos x = -\sqrt{3}$$

$$103. \sqrt{3}\sin x - 3\cos x = 0$$

$$104. \sqrt{3}\sin x - 3\cos x = \sqrt{6}$$

$$105. \sqrt{3}\sin x - 3\cos x = -\sqrt{6}$$

$$106. \sqrt{3}\sin x - 3\cos x = 3$$

$$107. \sqrt{3}\sin x - 3\cos x = -3$$

$$108. 3\sin x + \sqrt{3}\cos x = \sqrt{3}$$

$$109. 3\sin x + \sqrt{3}\cos x = -\sqrt{3}$$

$$110. 3\sin x + \sqrt{3}\cos x = 0$$

$$111. 3\sin x + \sqrt{3}\cos x = \sqrt{6}$$

$$112. 3\sin x + \sqrt{3}\cos x = -\sqrt{6}$$

$$113. 3\sin x + \sqrt{3}\cos x = 3$$

$$114. 3\sin x + \sqrt{3}\cos x = -3$$

$$115. \sin x + \cos x = 1$$

$$116. \sin x + \cos x = \frac{\sqrt{2}}{2}$$

$$117. \sin x + \cos x = \sqrt{2}$$

$$118. 3\sin x - \sqrt{3}\cos x = \sqrt{3}$$

$$119. 3\sin x - \sqrt{3}\cos x = -\sqrt{3}$$

$$120. 3\sin x - \sqrt{3}\cos x = 0$$

$$121. 3\sin x - \sqrt{3}\cos x = \sqrt{6}$$

$$122. 3\sin x - \sqrt{3}\cos x = -\sqrt{6}$$

$$123. 3\sin x - \sqrt{3}\cos x = 3$$

$$124. 3\sin x - \sqrt{3}\cos x = -3$$

$$125. \sin x + \cos x = -1$$

$$126. \sin x - \cos x = \frac{\sqrt{2}}{2}$$

$$127. \sin x - \cos x = \sqrt{2}$$