

EQUAZIONI GONIOMETRICHE

- 1) $2\operatorname{sen} x - 1 = 0$ $(x = 30^\circ + k \cdot 360^\circ) \vee (x = 150^\circ + k \cdot 360^\circ)$
- 2) $2\operatorname{sen} x + \sqrt{2} = 0$ $\left(x = -\frac{\pi}{4} + 2k\pi\right) \vee \left(x = \frac{5\pi}{4} + 2k\pi\right)$
- 3) $2\operatorname{sen}^2 x = 1$ $\left(x = \frac{\pi}{4} + k\frac{\pi}{2}\right)$
- 4) $\operatorname{sen}^2 x = 3\operatorname{sen} x$ $(x = k\pi)$
- 5) $2\operatorname{sen}^2 x + \operatorname{sen} x = 0$ $\left(x = -\frac{\pi}{6} + 2k\pi\right) \vee \left(x = \frac{7\pi}{6} + 2k\pi\right)$
- 6) $3\operatorname{sen}^2 x - \operatorname{sen} x - 4 = 0$ $\left(x = -\frac{\pi}{2} + 2k\pi\right)$
- 7) $4\operatorname{sen} x - 1 = 0$ $\left(x = \operatorname{arcsen}\left(\frac{1}{4}\right) + 2k\pi\right) \vee \left(x = \pi - \operatorname{arcsen}\left(\frac{1}{4}\right) + 2k\pi\right)$
- 8) $5\operatorname{sen} x - 1 = \sqrt{3}$ $(x = 33^\circ 7' 16'' + k \cdot 360^\circ) \vee (x = 146^\circ 52' 44'' + k \cdot 360^\circ)$
- 9) $2\operatorname{sen}^2 x = \sqrt{5} + 1$ $(\nexists x)$
- 10) $\cos x = 0$ $\left(x = \frac{\pi}{2} + k\pi\right)$
- 11) $\cos^2 x = 1$ $(x = k\pi)$
- 12) $2\cos x = \sqrt{3}$ $\left(x = \pm \frac{\pi}{6} + 2k\pi\right)$
- 13) $\cos^2 x + 2\cos x - 3 = 0$ $(x = 2k\pi)$
- 14) $\cos^3 x - \cos x = 0$ $\left(x = \frac{\pi}{2} + k\pi\right) \vee (x = k\pi)$
- 15) $4\cos^2 x - \cos x = 0$ $\left(x = \frac{\pi}{2} + k\pi\right) \vee \left(x = \pm \arccos\left(\frac{1}{4}\right) + 2k\pi\right)$
- 16) $\operatorname{sen}\left(3x + \frac{\pi}{4}\right) = 0$ $\left(x = -\frac{\pi}{12} + k\frac{\pi}{3}\right)$
- 17) $\cos\left(4x - \frac{\pi}{3}\right) = 1$ $\left(x = \frac{\pi}{12} + k\frac{\pi}{2}\right)$
- 18) $2\cos\left(4x - \frac{\pi}{6}\right) = -1$ $\left(x = \frac{5\pi}{24} + k\frac{\pi}{2}\right) \vee \left(x = \frac{3\pi}{8} + k\frac{\pi}{2}\right)$
- 19) $2\operatorname{tg}^2 x - \operatorname{tg} x = 0$ $(x = k\pi) \vee \left(x = \operatorname{arct}\left(\frac{1}{8}\right) + k\pi\right)$
- 20) $\operatorname{tg}^2 x - \sqrt{3}\operatorname{tg} x = 0$ $(x = k\pi) \vee \left(x = \frac{\pi}{3} + k\pi\right)$

$$21) \operatorname{tg}\left(2x + \frac{\pi}{4}\right) = -\frac{\sqrt{3}}{3}$$

$$22) \operatorname{tg}\left(\frac{\pi}{2} - 2x\right) = \sqrt{3}$$

$$23) 3 \cot g^2(2x) - 1 = 0$$

$$\left(x = -\frac{5\pi}{24} + k\frac{\pi}{2}\right)$$

$$\left(x = \frac{\pi}{12} + k\frac{\pi}{2}\right)$$

$$\left(x = \pm \frac{\pi}{6} + k\frac{\pi}{2}\right)$$