

⋮

$$\sin\left(\frac{1}{2}x - \frac{\pi}{2}\right) = \sin\left(\frac{1}{4}x - \frac{\pi}{4}\right).$$

$$\alpha = \frac{1}{2}x - \frac{\overline{u}}{2}$$

$$\alpha' = \frac{1}{4}x - \frac{\overline{u}}{4}$$

$$\alpha' + \alpha = \overline{u} + 2k\overline{u}$$

$$\frac{1}{2}x - \frac{\overline{u}}{2} + \frac{1}{4}x - \frac{\overline{u}}{4} = \overline{u} + 2k\overline{u}$$

$$\alpha' = \alpha + 2k\overline{u}$$

$$\frac{1}{4}x - \frac{\overline{u}}{4} = \frac{1}{2}x - \frac{\overline{u}}{2} + 2k\overline{u}$$

$$x - \overline{u} = 2x - 2\overline{u} + 8k\overline{u}$$

$$x = \overline{u} - 8k\overline{u}$$

$$k \in \mathbb{Z}$$

$$\sin\left(\frac{1}{2}x - \frac{\pi}{2}\right) = \sin\left(\frac{1}{4}x - \frac{\pi}{4}\right).$$

$$\alpha' = \pi - \alpha + 2k\pi$$

$$\alpha' + \alpha = \pi + 2k\pi$$

$$\frac{1}{4}x - \frac{\pi}{4} + \frac{1}{2}x - \frac{\pi}{2} = \pi + 2k\pi$$

$$x - \pi + 2x - 2\pi = 4\pi + 8k\pi$$

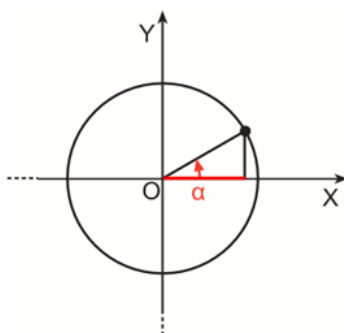
$$3x = 7\pi + 8k\pi$$

$$x = \frac{7}{3}\pi + \frac{8}{3}k\pi \quad k \in \mathbb{Z}$$

LE EQUAZIONI GONIOMETRICHE ELEMENTARI

6. EQUAZIONI PARTICOLARI

L'equazione $\cos \alpha = \cos \alpha'$



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Bergamini, Trifone, Barozzi – La matematica del triennio

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