

$$y = \sin x - \cos x + 3$$

$$y - 3 = \sin x - \cos x$$

$$\begin{cases} a = 1 \\ b = -1 \end{cases} \quad \sqrt{a^2 + b^2} = \sqrt{2}$$

$$y - 3 = \sqrt{2} \left[\frac{1}{\sqrt{2}} \sin x - \frac{1}{\sqrt{2}} \cos x \right]$$

$$y - 3 = \sqrt{2} \left[\cos\left(-\frac{\pi}{4}\right) \sin x + \sin\left(-\frac{\pi}{4}\right) \cos x \right]$$

$$\begin{cases} \cos \alpha = \frac{1}{\sqrt{2}} \\ \sin \alpha = -\frac{1}{\sqrt{2}} \end{cases} \quad \alpha = -\frac{\pi}{4}$$

$$y - 3 = \sqrt{2} \sin\left(x - \frac{\pi}{4}\right)$$

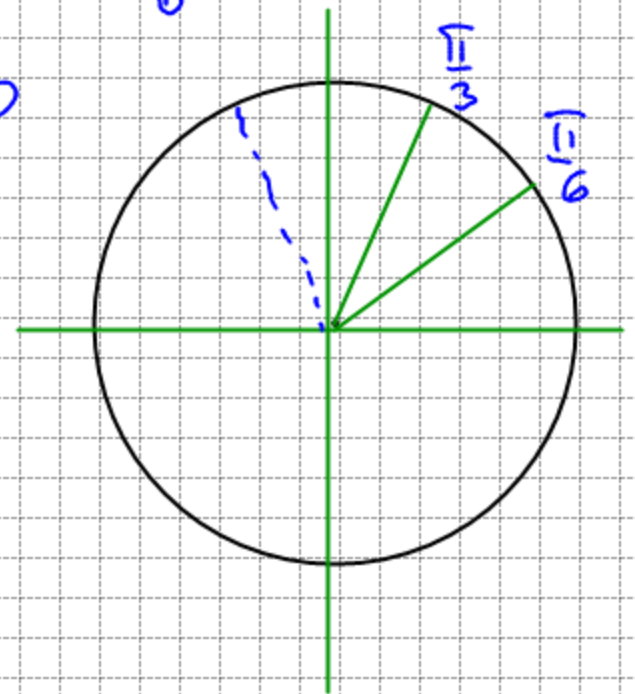
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$$\sin\left(\frac{\pi}{3} - x\right) + \cos\left(x + \frac{\pi}{6}\right) = 1$$

$$\sin \frac{\pi}{3} \cos x - \cos \frac{\pi}{3} \sin x + \cos x \cos \frac{\pi}{6} - \sin x \sin \frac{\pi}{6} - 1 = 0$$

$$\frac{\sqrt{3}}{2} \cos x - \frac{1}{2} \sin x + \frac{\sqrt{3}}{2} \cos x - \frac{1}{2} \sin x - 1 = 0$$

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



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Pango $\begin{cases} \sqrt{3} = a \\ -1 = b \end{cases} \quad \sqrt{a^2 + b^2} = 2$

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

$$\begin{cases} \frac{\sqrt{3}}{2} = \sin \alpha \\ -\frac{1}{2} = \cos \alpha \end{cases} \quad \alpha = \frac{2}{3}\pi$$

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

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

$$\begin{cases} \frac{2}{3}\pi + x = \frac{\pi}{6} + 2k\pi \quad k \in \mathbb{Z} \\ \frac{2}{3}\pi + x = \frac{5\pi}{6} + 2k\pi \quad k \in \mathbb{Z} \end{cases}$$

$$\begin{cases} x = \frac{\pi}{6} - \frac{2}{3}\pi + 2k\pi \quad k \in \mathbb{Z} \\ x = \frac{5\pi}{6} - \frac{2}{3}\pi + 2k\pi \quad k \in \mathbb{Z} \end{cases} \quad \begin{cases} x = -\frac{\pi}{2} + 2k\pi \quad k \in \mathbb{Z} \\ x = \frac{\pi}{6} + 2k\pi \quad k \in \mathbb{Z} \end{cases}$$

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

2/2

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pongo

$$\begin{cases} a = \sqrt{3} \\ b = 1 \end{cases}$$

$$\sqrt{a^2 + b^2} = 2$$

$$2 \left[\frac{\sqrt{3}}{2} \cos x - \frac{1}{2} \sin x \right] = 1$$

$$\begin{cases} \sin \alpha = \frac{\sqrt{3}}{2} \\ \cos \alpha = \frac{1}{2} \end{cases} \quad \alpha = \frac{\pi}{3}$$

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

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

$$\begin{cases} \frac{\pi}{3} - x = \frac{\pi}{6} + 2k\pi \quad k \in \mathbb{Z} \\ \frac{\pi}{3} - x = \frac{5\pi}{6} + 2k\pi \quad k \in \mathbb{Z} \end{cases}$$