

$$\cos\left(\frac{\pi}{2} - 5x\right) = \cos\left(\frac{\pi}{3} - x\right)$$

$$\Leftrightarrow \begin{cases} \frac{\pi}{2} - 5x = \frac{\pi}{3} - x + 2k\pi \\ \text{ou} \\ \frac{\pi}{2} - 5x = x - \frac{\pi}{3} + 2k\pi \end{cases}$$

$$\Leftrightarrow \begin{cases} -4x = \frac{\pi}{3} - \frac{\pi}{2} + 2k\pi \\ \text{ou} \\ -6x = -\frac{\pi}{3} - \frac{\pi}{2} + 2k\pi \end{cases}$$

$$\Leftrightarrow \begin{cases} -4x = -\frac{\pi}{6} + 2k\pi \\ \text{ou} \\ -6x = \frac{-5\pi}{6} + 2k\pi \end{cases}$$

$$\Leftrightarrow \begin{cases} x = \frac{\pi}{24} + \frac{2k'\pi}{4} \\ \text{ou} \\ x = \frac{5\pi}{36} + \frac{2k'\pi}{6} \end{cases}$$

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

$$\Leftrightarrow \begin{cases} x = \frac{\pi}{24} + \frac{k'\pi}{2} \\ \text{ou} \\ x = \frac{5\pi}{36} + \frac{k'\pi}{3} \end{cases}$$