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$$\eta\mu^2\left(x + \frac{\pi}{4}\right) + \sigma\upsilon\nu^2\left(3x - \frac{\pi}{4}\right) = 1 \Rightarrow \sigma\upsilon\nu^2\left(3x - \frac{\pi}{4}\right) = 1 - \eta\mu^2\left(x + \frac{\pi}{4}\right) \Rightarrow$$

$$\Rightarrow \sigma\upsilon\nu^2\left(3x - \frac{\pi}{4}\right) = \sigma\upsilon\nu^2\left(x + \frac{\pi}{4}\right) \Rightarrow$$

$$\sigma\upsilon\nu\left(3x - \frac{\pi}{4}\right) = \sigma\upsilon\nu\left(x + \frac{\pi}{4}\right) \Rightarrow$$

$$3x - \frac{\pi}{4} = 2\kappa\pi + x + \frac{\pi}{4} \quad \text{ή} \quad 3x - \frac{\pi}{4} = 2\kappa\pi - x - \frac{\pi}{4}$$

$$\Rightarrow 2x = 2\kappa\pi + \frac{\pi}{4} + \frac{\pi}{4}$$

$$\Rightarrow 2x = 2\kappa\pi + \frac{\pi}{2}$$

$$\Rightarrow x = \kappa\pi + \frac{\pi}{4}$$

$$4x = 2\kappa\pi \Rightarrow$$

$$x = \frac{\kappa\pi}{2}$$

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$$\sigma\upsilon\nu\left(3x - \frac{\pi}{4}\right) = -\sigma\upsilon\nu\left(x + \frac{\pi}{4}\right) \Rightarrow$$

$$\sigma\upsilon\nu\left(3x - \frac{\pi}{4}\right) = \sigma\upsilon\nu\left(\pi - x - \frac{\pi}{4}\right) \Rightarrow$$

$$\sigma\upsilon\nu\left(3x - \frac{\pi}{4}\right) = \sigma\upsilon\nu\left(\frac{3\pi}{4} - x\right) \Rightarrow$$

$$3x - \frac{\pi}{4} = 2\kappa\pi + \frac{3\pi}{4} - x \quad \text{ή} \quad 3x - \frac{\pi}{4} = 2\kappa\pi - \frac{3\pi}{4} + x$$

$$\Rightarrow 4x = 2\kappa\pi + \frac{3\pi}{4} + \frac{\pi}{4} \quad \Rightarrow 2x = 2\kappa\pi - \frac{3\pi}{4} + \frac{\pi}{4}$$

$$\Rightarrow 4x = 2\kappa\pi + \frac{4\pi}{4} \quad \Rightarrow 2x = 2\kappa\pi - \frac{2\pi}{4}$$

$$\Rightarrow x = \frac{\kappa\pi}{2} + \frac{\pi}{4} \quad \Rightarrow 2x = 2\kappa\pi - \frac{\pi}{2}$$

$$\Rightarrow x = \kappa\pi - \frac{\pi}{4}$$