

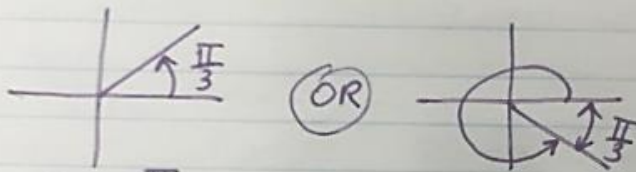
$$2 \cos 2x = 1, \quad 0 \leq x \leq 2\pi \rightarrow 0 \leq 2x \leq \frac{4\pi}{2}$$

$$\boxed{\cos 2x} = \frac{1}{2} > 0 \quad \begin{array}{c} S \text{ (A)} \\ T \text{ (C)} \end{array}$$

$$2x \in \text{QI or } 2x \in \text{QIV}$$

reference angle

$$\text{RAA: } \cos^{-1}\left(\left|\frac{1}{2}\right|\right) = \cos^{-1}\left(\frac{1}{2}\right) = \frac{\pi}{3}$$



$$2x = \frac{\pi}{3}$$

$$2x = 2\pi - \frac{\pi}{3}$$

$$\pi = \frac{6\pi}{6}$$

$$x_1 = \frac{\pi}{6} \checkmark$$

$$2x = \frac{5\pi}{3}$$

$$x_4 = \frac{5\pi}{6} \checkmark$$

$$x_2 = \frac{\pi}{6} + \frac{6\pi}{6} = \frac{7\pi}{6} \checkmark$$

$$x_3 = \frac{7\pi}{6} + \frac{6\pi}{6} = \frac{13\pi}{6} \times$$

$$x_5 = \frac{5\pi}{6} + \frac{6\pi}{6} = \frac{11\pi}{6} \checkmark$$

$$x_6 = \frac{11\pi}{6} + \frac{6\pi}{6} = \frac{17\pi}{6} \times$$

$$p = \frac{2\pi}{|k|} = \frac{2\pi}{2} = \pi$$

$$y = \cos 2x$$