

$$\cos x \cdot \cos 2x \cdot \cos 3x \leq 0$$

$$\frac{1}{2}[\cos 4x + \cos 2x] \cdot \cos 2x \leq 0$$

$$[\cos 4x + \cos 2x] \cdot \cos 2x \leq 0$$

$$[2\cos^2 2x - 1 + \cos 2x] \cdot \cos 2x \leq 0$$

$$\cos 2x = t$$

$$(2t^2 + t - 1)t \leq 0$$

$$t = -1, \frac{1}{2}$$

$$(t+1)(t-\frac{1}{2})t \leq 0$$

$$t \in (-\infty; -1] \cup [0; \frac{1}{2}]$$

$$\cos 2x = -1$$

$$2x = \pi + 2\pi k$$

$$x = \frac{\pi}{2} + \pi k$$

$$\cos 2x \geq 0$$

$$\cos 2x \leq \frac{1}{2}$$

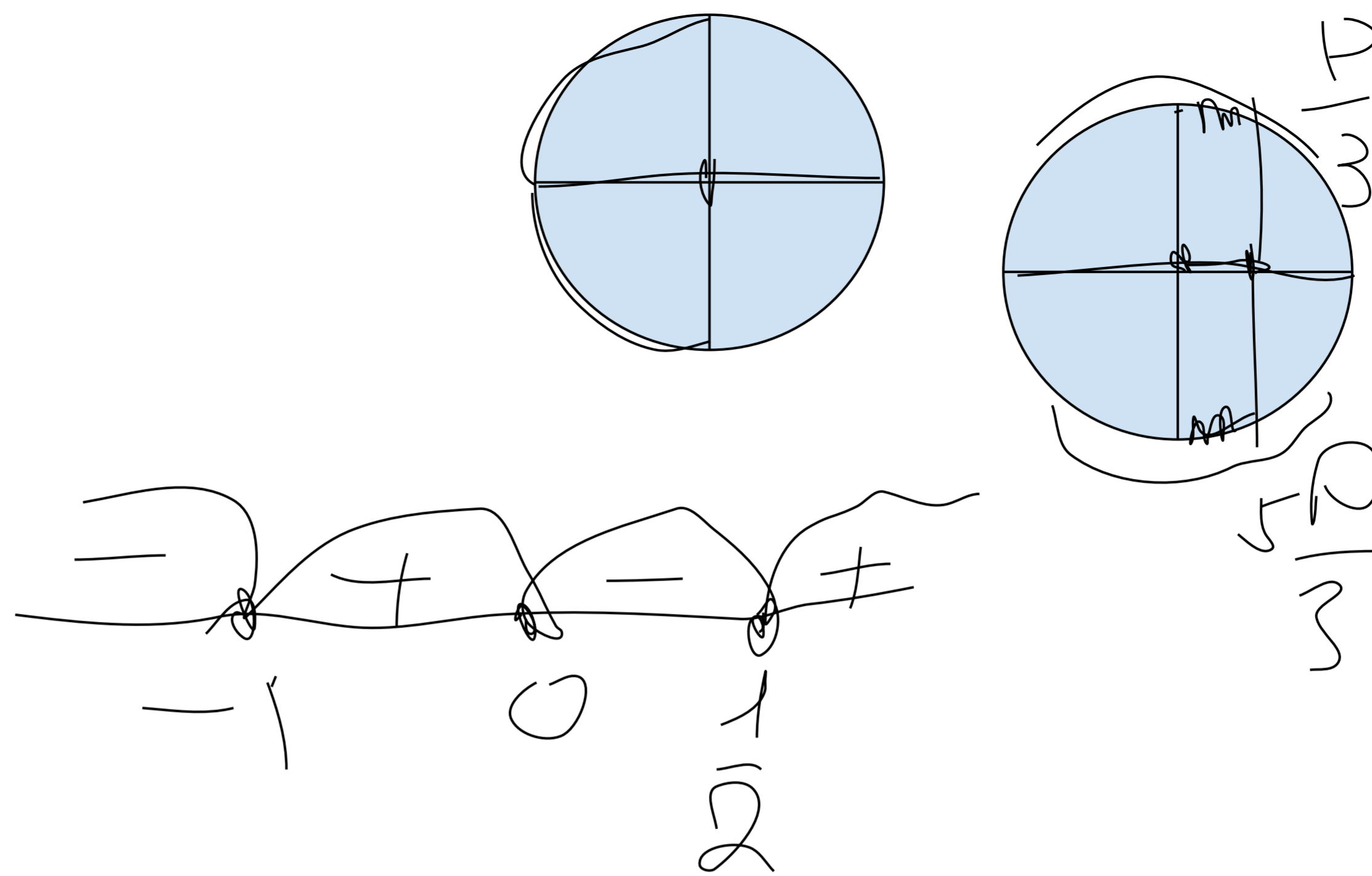
$$\frac{\pi}{3} + 2\pi k \leq 2x \leq \frac{\pi}{2} + 2\pi k$$

$$\frac{3\pi}{2} + 2\pi k \leq 2x \leq \frac{5\pi}{3} + 2\pi k$$

$$\frac{\pi}{6} + \pi k \leq x \leq \frac{\pi}{4} + \pi k$$

$$\frac{3\pi}{4} + \pi k \leq x \leq \frac{5\pi}{6} + \pi k$$

$$x = \frac{\pi}{2} + \pi k$$



НЕРАВЕНСТВА И РАЗЛОЖЕНИЕ НА МНОЖИТЕЛИ 04

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