angular velocities $\pi \quad \frac{\pi}{2} \quad \frac{\pi}{3} \quad \frac{\pi}{4} \quad \frac{\pi}{5} \quad \frac{\pi}{6} \ldots$

angular distances $\pi t \quad \frac{\pi t}{2} \quad \frac{\pi t}{3} \ldots$

collinear on same side then for value of "t" such that

$$\pi t - 2n_1\pi = \frac{\pi t}{2} - 2n_2\pi = \frac{\pi t}{3} - 2n_3\pi \ldots$$

where n_1 n_2 n_3 are any positive integers

$$t - 2n_1 = \frac{t}{2} - 2n_2 = \frac{t}{3} - 2n_3 = \frac{t}{4} - 2n_4 = \frac{t}{5} - 2n_5 \ldots$$

First pair $\frac{t}{2} = 2(n_1 - n_2)$

$t = 4(n_1 - n_2)$

Combine in third $\frac{2}{3}t = 4(n_1 - n_2) - 2n_3$

$t = 6n_1 - 6n_2 - 3n_3$

Combine in fourth $\frac{3}{4}t = 6n_1 - 6n_2 - 3n_3 - 2n_4$

$t = 8n_1 - 8n_2 - 4n_3 - \frac{8}{3}n_4$

$n_1 = 2$

$16 - 8 - 4 - 8/3$