

Semana 6

1) $n = 100$ $t = 60 \text{ seg}$ $T = 2$ $n = ?$

$$T = \frac{t}{n}$$

$$n = \frac{1}{T}$$

$$T = \frac{60 \text{ seg}}{100} = 0.054 \text{ seg} \quad n = \frac{1}{0.054} = 2043$$

2) $n = 150$ $t = 60$ $T = ?$

$$T = \frac{t}{n}$$

$$t = \frac{60}{150} = 0.4 \text{ seg}$$

3) $t = 15 \text{ seg}$ $n = 4$ $\theta = 1440^\circ$

$$\omega = \frac{\theta}{t}$$

$$\omega = \frac{1440^\circ}{15 \text{ seg}} = \omega = 96 \text{ grad/seg}$$

$$T = \frac{t}{n}$$

$$\omega = \frac{2\pi \text{ rad}}{T}$$

$$T = \frac{15}{4} = 3.75 \text{ seg} \quad \omega = \frac{2(3.14) \text{ rad}}{3.75 \text{ seg}}$$

$$\omega = 167 \text{ radianes/seg} //$$

4) $n = 80$ $t = 60 \text{ seg}$ $T = ?$ $\omega = ?$ $\theta = 28.800$

$$\omega = \frac{\theta}{t}$$

$$\omega = \frac{2\pi \text{ rad}}{T}$$

$$\omega = \frac{28.800}{60}$$

$$\omega = 480 \text{ grad/seg}$$

$$\omega = \frac{2(3.14) \text{ rad}}{0.75 \text{ seg}}$$

$$5) n = 121$$

$$t = 60 \text{ seg}$$

$$T = ?$$

$$T = \frac{t}{n}$$

$$t = \frac{60 \text{ seg}}{121}$$

$$T = 0.50 \text{ seg} //$$

$$6) n = 3$$

$$t = 8 \text{ seg}$$

$$\theta = 1080 \text{ grades}$$

$$\omega = \frac{\theta}{t}$$

$$T = \frac{t}{n}$$

$$\omega = \frac{1080 \text{ grad}}{8 \text{ seg}}$$

$$t = \frac{8 \text{ seg}}{5}$$

$$\omega = 135 \text{ grad/seg}$$

$$t = 267 \text{ seg}$$

$$\omega = 2.35 \text{ rad/seg}$$

$$7) n = 2,350$$

$$t = 60 \text{ seg}$$

$$\theta = 846,000$$

$$\omega = \frac{\theta}{t}$$

$$\omega = 846,000$$

$$\omega = 2.09 \text{ grad/seg} //$$