Semana 6

1) $h = 1,100$ $t = 60$ seg $I = ?$ $N = ?$

$T = \frac{t}{h}$ $N = \frac{1}{T}$

$T = \frac{60 \text{ seg}}{1,100} = 0.054 \text{ seg}$ $N = \frac{1}{0.054} = 20 \text{ Hz}$

2) $h = 150$ $t = 60$ $I = ?$

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

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

3) $t = 15$ seg $h = 4$ $\theta = 1440°$

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

$W = \frac{1440°}{15 \text{ seg}} = W = 96 \text{ grad/seg}$

$T = \frac{t}{h}$ $W = 2\pi \text{ rad}$

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

4) $W = \frac{\theta}{t}$ $t = 60$ seg $T = ?$ $W = ?$ θ 28,800

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

$W = \frac{28,800}{60}$ $W = 480$ grad/seg $W = \frac{2\ 3\ 14}{0.75 \text{ seg}}$

$W = 8.38$ rad/seg

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

$T = \frac{60}{80}$ $T = 0.75$ segundos

5) $h = 121$ $t = 60$ seg $T = ?$

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

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

$T = 050$ seg

6) $h = 3$ $t = 8$ seg $\theta = 1,080$ grados

$W = \frac{\theta}{t}$ $T = \frac{t}{h}$

$W = \frac{1080 \text{ grad}}{8 \text{ seg}}$ $T = \frac{8 \text{ seg}}{3}$

$W = 135$ grad/seg $T = 26$ seg

$\frac{2(3\ 14) \text{ rad}}{2.67 \text{ seg}}$ $W = \frac{2\pi \text{ rad}}{T}$

$W = 2.35$ rad/seg

7) $n = 3.200$ $t = 60$ seg θ 1,152,000°

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

$T = \frac{60}{3,200}$ $\quad T = 0.19$ seg

$w = \frac{\theta}{t}$ $\quad w = \frac{2\pi \text{ rad}}{T}$

$w = \frac{2(3.14) \text{ rad}}{0.19}$

$w = 19,200$ grad/seg $\quad w = 33.07$ rad/seg

8) $n = 4$ $\quad t = 12$ seg $\quad \theta$ 1.440

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

$T = \frac{12 \text{ seg}}{4}$ $\quad T = 3$ seg

$w = \frac{\theta}{t}$ $\quad w = \frac{2\pi \text{ rad}}{T}$

$w = \frac{1,440 \text{ grad}}{12 \text{ seg}}$ $\quad w = \frac{2(3.14) \text{ rad}}{3 \text{ seg}}$

$w = 120$ grad/seg $\quad w = 209$ grad/seg

a) $n = 2,350$ t 60 seg θ 846,000

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

$$W = \frac{846,000^\circ}{60\ seg} \qquad \underline{W = 14,100\ grad/seg}$$

b) $T = 0.7$ seg $N = ?$ $t = 60$

$$T = \frac{t}{n} \qquad N = Tt2 \qquad \theta = 84 \times 360 = 30,240^\circ$$

$N = 0.7\ seg \times 60 \times 2 =$

$N = 84$

$$W = \frac{\theta}{t} \qquad W = \frac{2\pi\ rad}{T}$$

$$W = \frac{30,240\ grad}{60\ seg} \qquad W = \frac{2(3.14)\ rad}{0.7\ seg}$$

$\underline{W = 504\ grad/seg}$ $\underline{W = 8.98\ rad/seg}$