S6

1) $n = 1100$ $t = 60$ seg $T = ?$ $N = ?$

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

$T = \frac{60 \text{ seg}}{1100} = 0.0054$ seg $N = \frac{1}{0.0054} = 20$ Hz

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

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

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

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

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

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

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

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

$W = 1.67$ radianes / seg

4) $n = 80$ $t = 60$ seg $T = ?$ $w = ?$ $\theta = 28.800°$

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

$w = \frac{28.800}{60}$ $\quad w = 480$ grad/seg $\quad w = \frac{2(3,14)\text{ rad}}{0,75 \text{ seg}}$

$w = 8,38$ rad/seg

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

$T = \frac{60}{80} =$ $T = 0,75$ segundos

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

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

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

$T = 0,50$ seg

6) $n = 3$ $t = 8$ seg $\theta = 1.080°$ grados

$w = \frac{\theta}{t}$ $\quad T = \frac{t}{n}$

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

$w = 135$ grad/seg $\quad T = 2,67$ seg

$w = \frac{2(3,14)\text{ rad}}{2,67 \text{ seg}}$ $\quad w = \frac{2\pi \text{ rad}}{T}$

$w = 2,35$ rad/seg

7) n = 3,200 t = 60 seg θ = 115,200°

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

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

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

$w = \frac{115,200°}{60s}$ $w = \frac{2(3.14)rad}{0.19s}$

w = 19,200 grad/seg **w = 33.07 rad/seg**

8) n = 4 t = 12 seg θ = 1440

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

$T = \frac{12 seg}{4}$ **T = 3 seg**

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

$w = \frac{1440 grad}{12 seg}$ $w = \frac{2(3.14)rad}{3 seg}$

w = 120 grad/seg **w = 2.09 grad/seg**

9) $n = 2,350$ $t = 60$ seg $\theta = 846,000$

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

$w = \frac{846,000°}{60 \text{ seg}}$ $w = 14,100$ grad/seg

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

$T = \frac{t}{n}$ $N = T \cdot 2$ $\theta = 84 \times 360 = 30,240°$

$N = 0.7 \text{ seg} \times 60 \times 2 =$

$N = 84$

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

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

$w = 504$ grad/seg $w = 8.98$ rad/seg