

P # D

Ch 14 - Worksheet

$$f = 2.4 \text{ Hz}$$

$$m = 5.0 \text{ kg}$$

Find T_s : $f = \frac{1}{T}$

$$(2.4 \text{ Hz}) = \frac{1}{T_s}$$

$$T_s = .41\bar{6} \text{ sec}$$

Find k : $T_s = 2\pi \cdot \sqrt{\frac{m}{k}}$

$$(.41\bar{6} \text{ sec}) = 2\pi \cdot \sqrt{\frac{5.0 \text{ kg}}{k}}$$

$$k = 1140 \text{ N/m}$$