

Name AP/PM

Ex 13.1 p 392

at rest
 $F = -kx = -mg$

$$x = 2 \text{ cm} = .02 \text{ m}$$

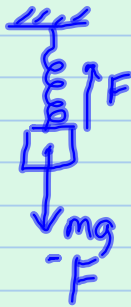
$$m = .55 \text{ kg}$$

$$k = ?$$

$$-kx = -mg \quad 9.8 \frac{\text{m}}{\text{s}^2}$$

$$k(.02) = .55(9.8)$$

$$k = \frac{.55(9.8)}{.02} = 269.5 \frac{\text{N}}{\text{m}}$$



$$F = -kx$$

| | |
N $\frac{\text{N}}{\text{m}}$ m

$$F = wt = mg$$