Pt 23

Ch 13 - pg 420

$m_1 = 10\ g = .010\ kg$

$x_1 = -3.9\ cm = -.039\ m$

$F = -k \cdot x$

$(.010\ kg)(9.8\ m/s^2) = -k \cdot (-.039\ m)$

$k = 2.51\ N/m$

$m_2 = .025\ kg$

$T = 2 \cdot \pi \cdot \sqrt{\frac{m}{k}}$

$= 2 \cdot \pi \cdot \sqrt{\frac{.025\ kg}{2.51\ N/m}}$

$\boxed{T = .627\ sec}$