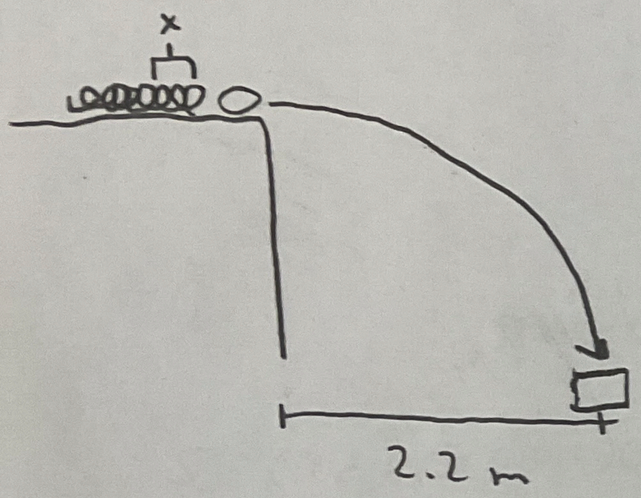
SW #9 - Justin Davis



Spring Potential energy

$$PE_i + PE_{spring} = KE_f + PE_f$$

$$PE_{spring} = \frac{1}{2}kx^2$$

first att: $\Delta x = 1.93$ m

$$v_f^2 - v_i^2 = 2(a)\Delta x$$

$$0 - v_i^2 = 2(-10)(1.93)$$

$$v_i = 6.213 \text{ m/s}$$

$$\frac{1}{2}k(0.011) + \frac{1}{2}m$$