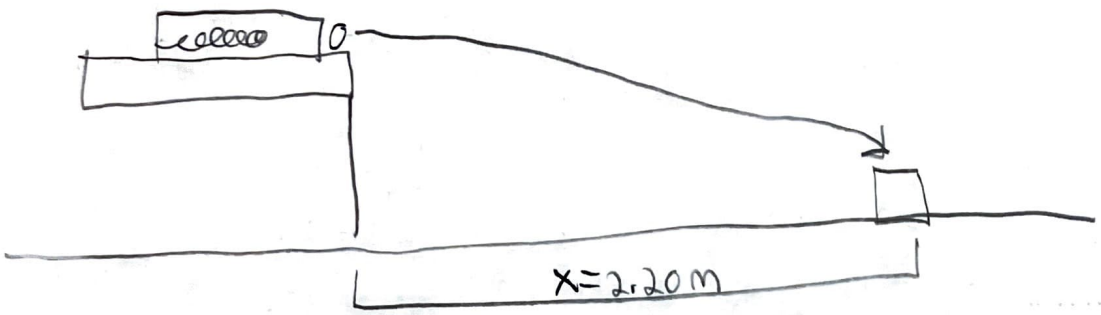
Final B - Mike Thielman TA: Xihe Han

1.



Equations:

- $U = \frac{1}{2}kx^2$
- $KE = \frac{1}{2}mv^2$
- $U = mgh$

Before: (Bobby)

- $mgh + \frac{1}{2}kx^2 = \frac{1}{2}mv^2$
- $2mgh + kx^2 = mv^2$
- $2gh + \frac{kx^2}{m} = v^2$
- $\sqrt{2gh + \frac{kx^2}{m}} = v$

- $2.20m - 0.27m = 1.93m$
- $\Delta x = 1.93m$
- $a_x = 0$