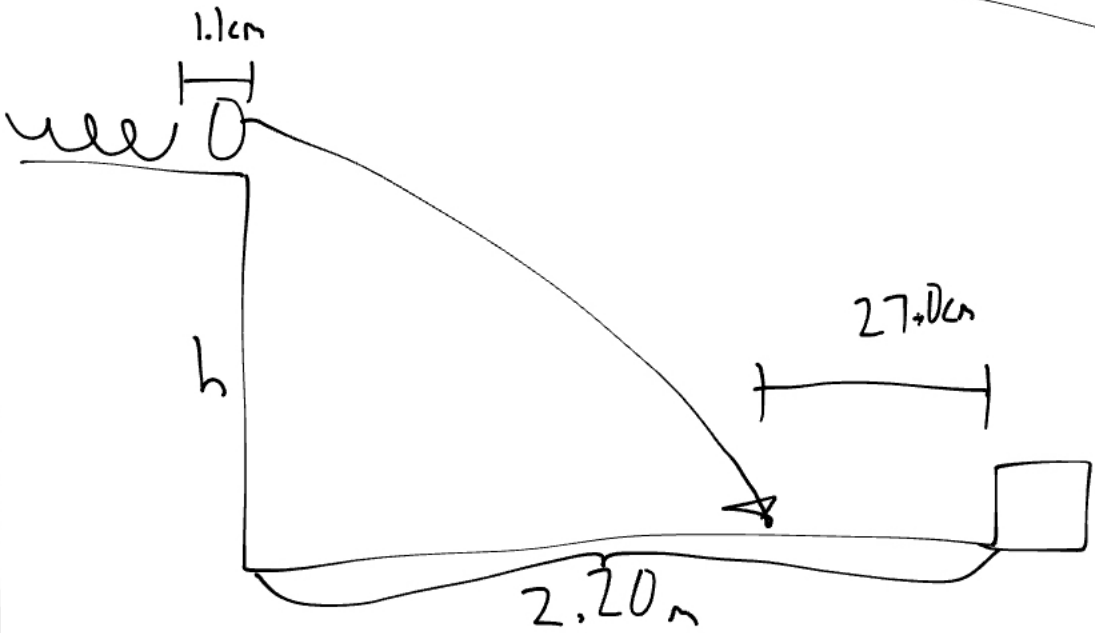

$EE = \frac{1}{2}kx^2$

$EE = KE_x = \frac{1}{2}mv_x^2$

$v_x t = d$

$\frac{1}{2}kx^2 = \frac{1}{2}mv_x^2$

$v_x = \sqrt{\frac{kx^2}{m}}$

$v_x = x\sqrt{\frac{k}{m}}$

$d = x t\sqrt{\frac{k}{m}}$ $\quad t\sqrt{\frac{k}{m}} = \text{constant}$

d and x have linear relationship

1.1cm compressed = 1.93m travelled

$\frac{1.1\text{cm}}{193\text{cm}} = \frac{x}{220\text{cm}}$

$x = 1.254\text{cm}$