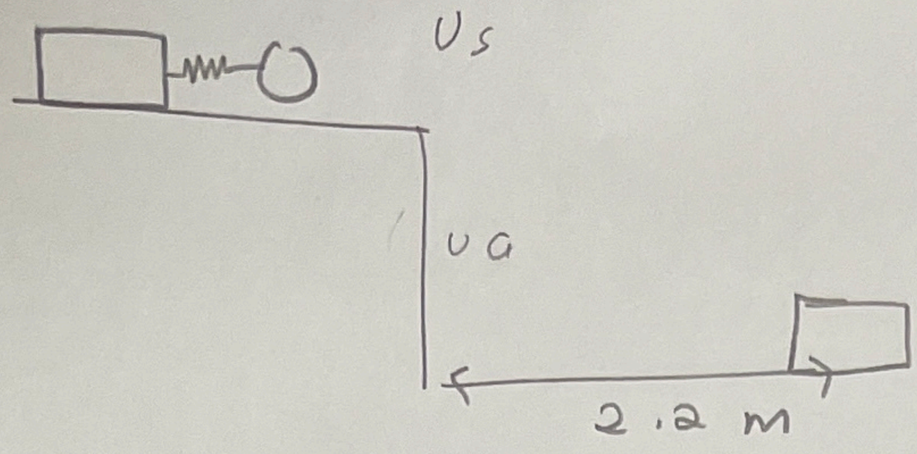
Question 9



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

$mgh = \frac{1}{2}mv^2$

$\frac{1}{2}kx^2 + mgh = \frac{1}{2}mv^2$

mgh

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

at $x = 1.1\ cm$

$S_1 = 2.2\ m - 0.27\ m$

$= 1.93\ m$

$V_1 = \frac{kx^2}{m}$

$\frac{S_1}{S_2} = \frac{V_1}{V_2}$

$S_2 = 2.2\ m$

$S_1 = 1.93\ m$

$f_x = ma$

$0 \rightarrow$