

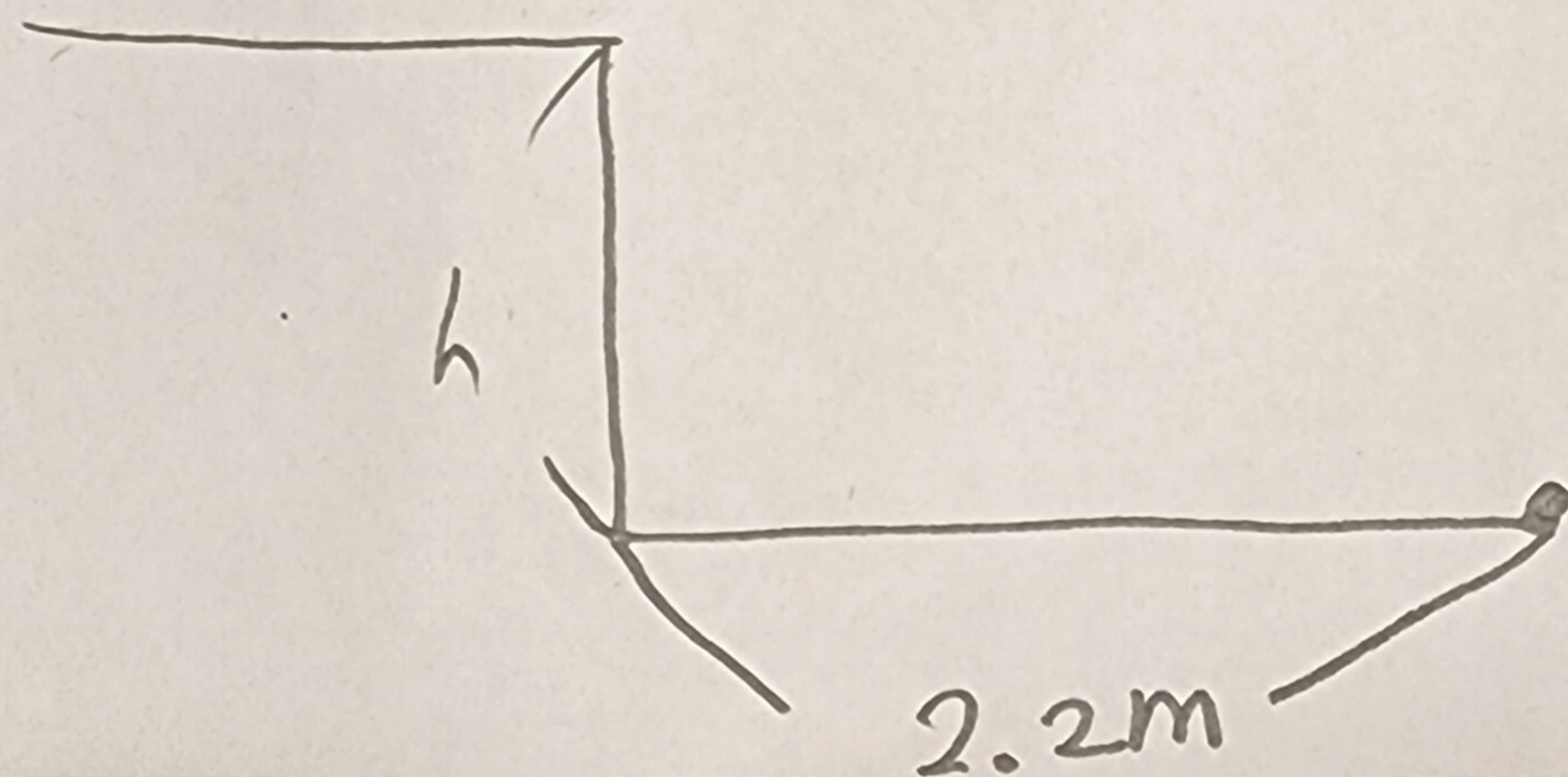
Q9

$$V_o =$$

$$V_f =$$

$$V_s = \frac{1}{2} m v^2$$

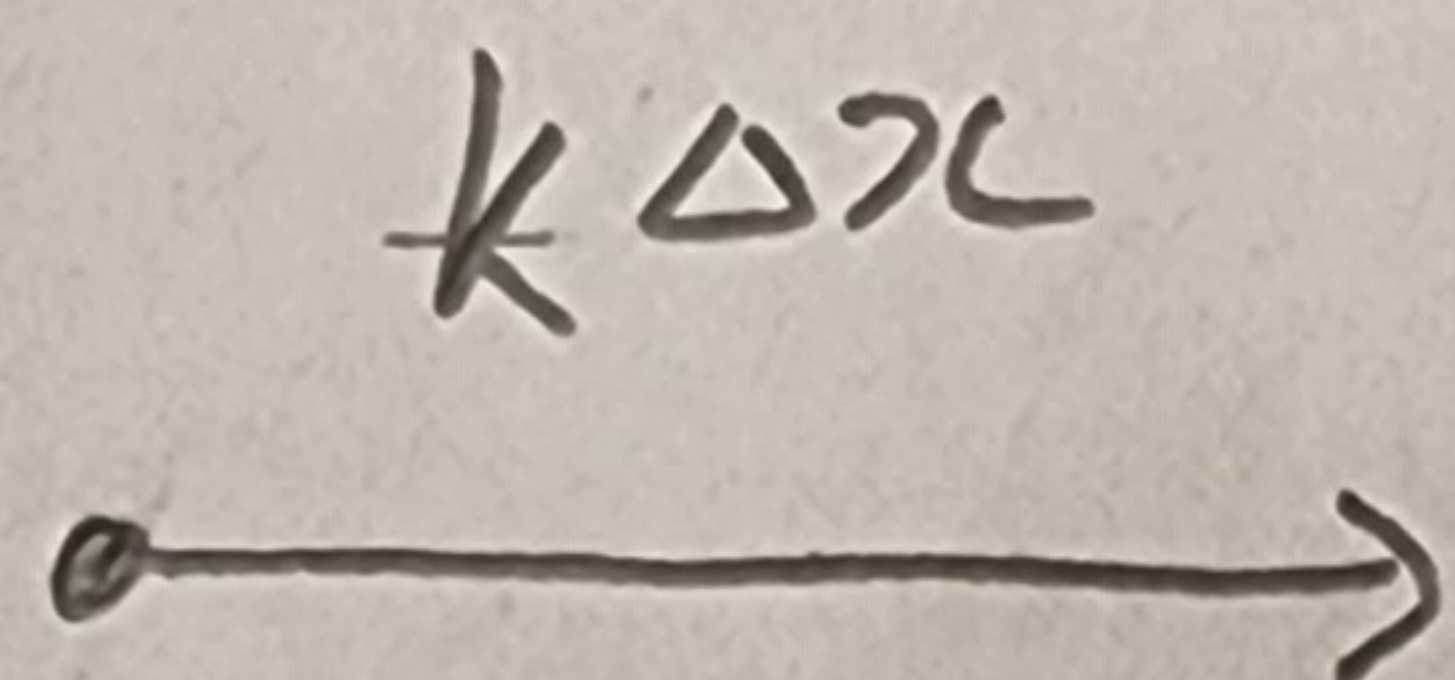
$$F_s = -k \Delta x$$



M_m = mass of marble

Compress : 1.1 cm

$$\text{Traveled D: } 2.2 - 0.27 = 1.93$$



$$-(1.1)k = 1.93$$

$$k = -1.754$$

$$-xk = 2.2$$

$$x = 1.25$$

$$\boxed{\therefore 1.25 \text{ cm}}$$

$$a = 0$$