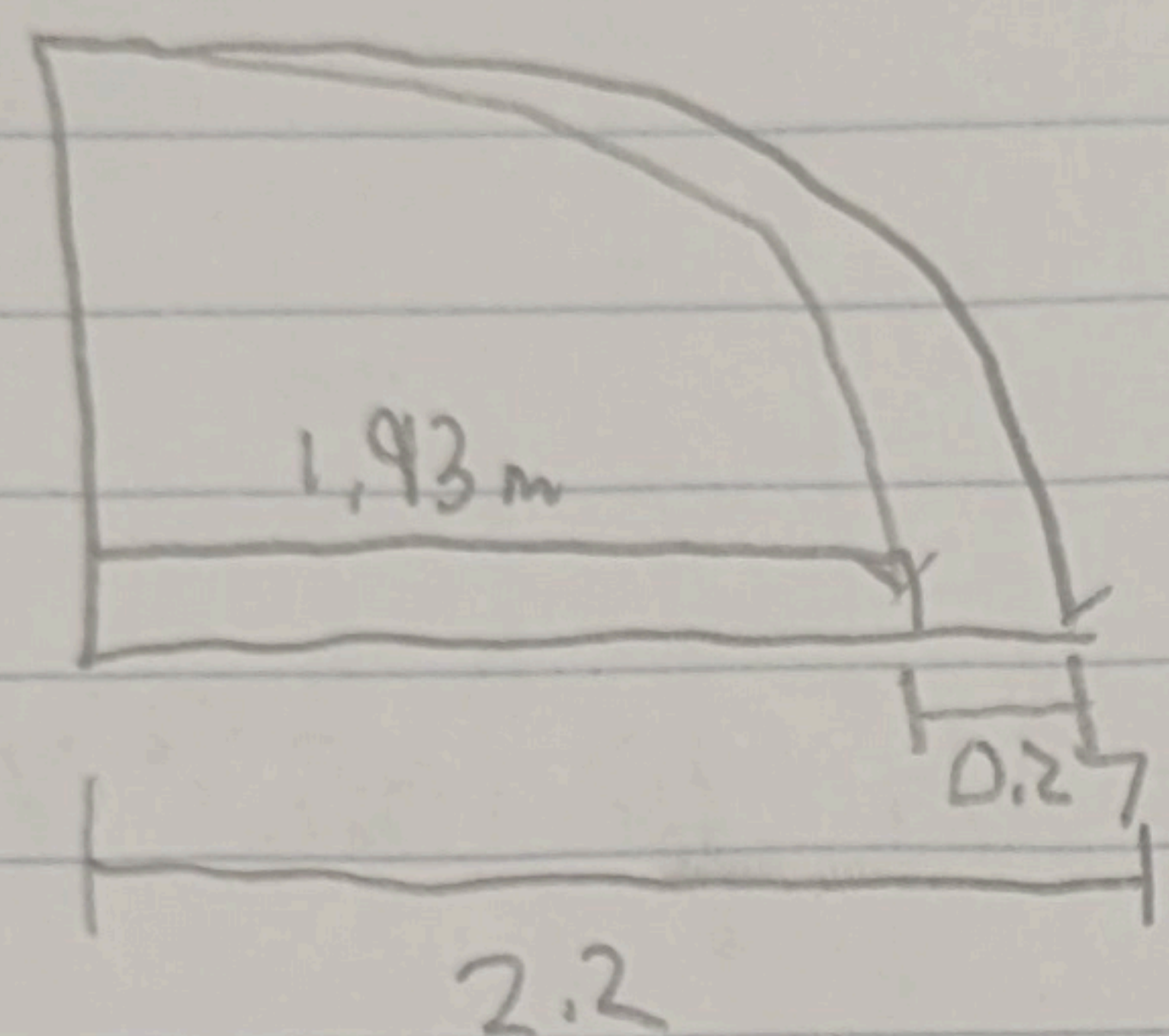


Q4 Bradley Pierce

$$x_f = 2.2m$$

$$x_{si} = 0.011m \quad \Delta x_s = 1.93m$$



$$K = 175.45 \text{ N/m} = 1$$

$$\frac{1}{2}K(x)^2 =$$

$$\frac{1}{2}(175.45)(x)^2 = F \times d$$

$$\frac{0.011}{1.93} = \frac{0}{2.2m}$$

$$mgh + F \times d = \frac{1}{2} m V^2 + mgh$$

$\cancel{SD_1} \quad \quad \quad 0$

$$(10 \times h) + \frac{1}{2}(175.45)(x)^2 = \frac{1}{2}V^2$$

$$0.01254m$$