

Q 9

2.2 m

$$27.0 \text{ cm} = 0.27 \text{ m}$$

$$g = 10 \text{ m/s}^2$$

$$X = V_0 t \quad h = \frac{1}{2} g t^2$$

$$X = V_0 \sqrt{2h/g}$$

$$2.2 - 0.27 = 1.93 \text{ m}$$

$$I_2 = \frac{P}{D_1}(I_1) = \left( \frac{2.2 \text{ m}}{1.93 \text{ m}} \right) (1.10 \text{ cm}) = 1.25 \text{ cm}$$