

995]

$$U = 2500 \text{ V}$$

$$d = 0,48 \text{ m}$$

$$F = q \cdot E = q \frac{U}{d}$$

$$F = m \cdot a$$

$$a = \frac{q}{m} \frac{U}{d} =$$

$$v^2 = v_0^2 + 2as$$

$$v_0 = 0 \quad s = d$$

$$v^2 = 2ad$$

$$b) \quad v = \sqrt{2ad} = \sqrt{2d \frac{qU}{m}} = \sqrt{\frac{2qU}{m}} = 3 \cdot 10^7 \text{ m/s}$$

$$c) \quad v = \sqrt{\frac{2qU}{m}} \Rightarrow \sqrt{2} \cdot 3 \cdot 10^7 = 4.2 \cdot 10^7 \text{ m/s}$$