

Mass of a planet:

$$V^2 = V_0^2 + 2ax$$

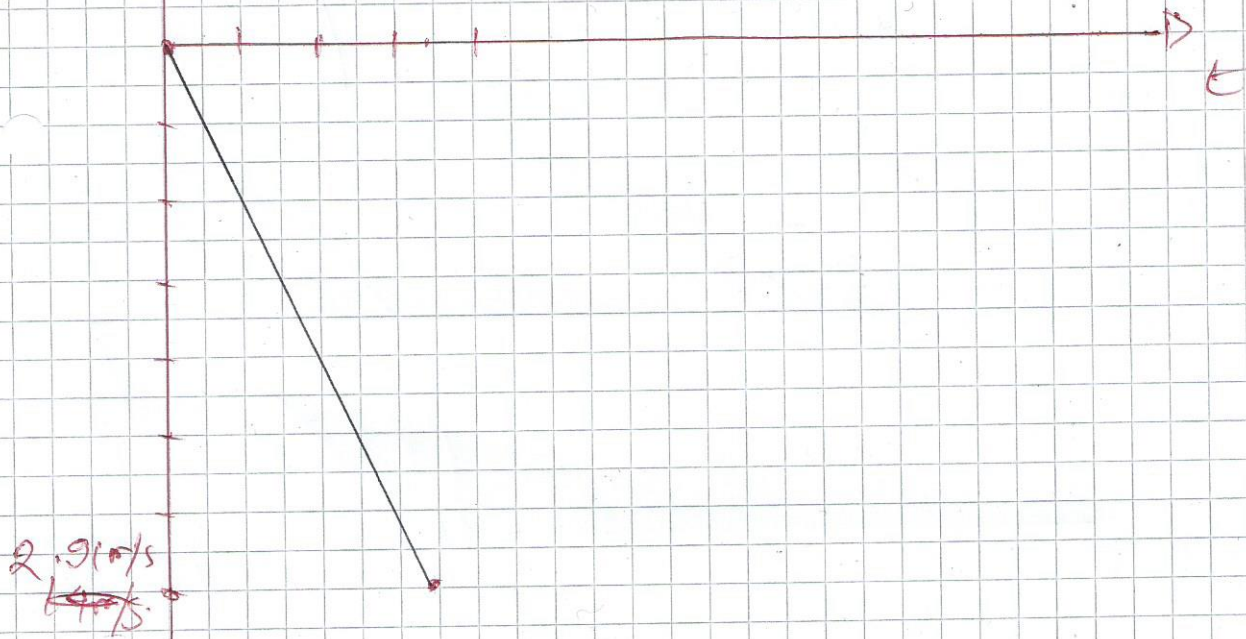
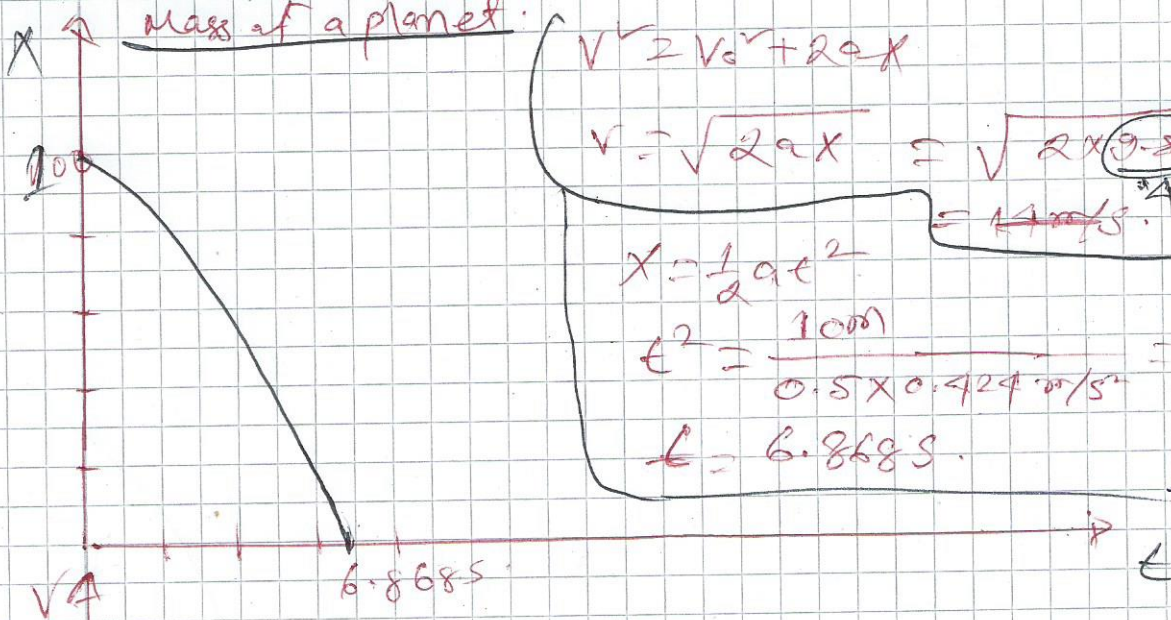
$$V = \sqrt{2ax} = \sqrt{2 \times 0.81 \times 100m}$$

$$= 12.708 \text{ m/s} \quad \text{*404} = 2.01 \text{ m/s}$$

$$x = \frac{1}{2}at^2$$

$$t^2 = \frac{100m}{0.5 \times 0.424 \text{ m/s}^2} = \sqrt{\frac{100m}{0.5 \times 0.424 \text{ m/s}^2}}$$

$$t = 6.868 \text{ s}$$



a

