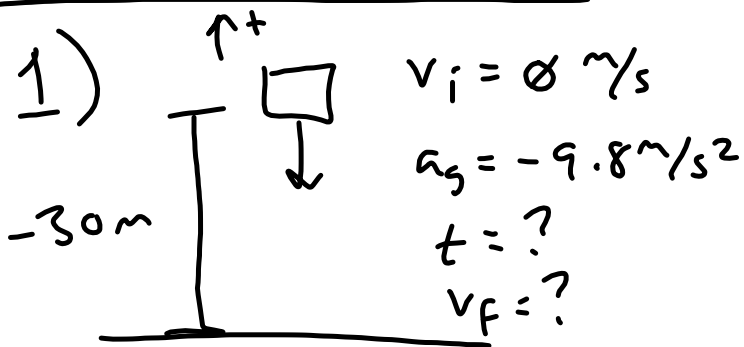


EXAM REVIEW



$$v_f^2 = v_i^2 + 2 a_g \Delta y$$

$$v_f = \sqrt{2 a_g \Delta y}$$

$$= \sqrt{2(-9.8 \text{ m/s}^2)(-30 \text{ m})}$$

$$= -24.2 \text{ m/s}$$

$$\Delta y = v_i t + \frac{1}{2} a_g t^2$$

$$t = \sqrt{\frac{2 \Delta y}{a_g}}$$

$$= \sqrt{\frac{2(-30 \text{ m})}{-9.8 \text{ m/s}^2}}$$

$$= 2.417 \text{ s}$$