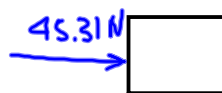
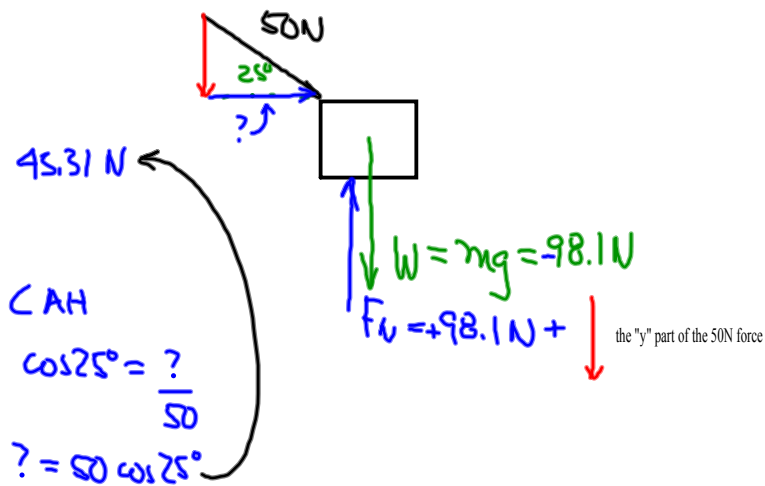


HOW FAR WILL THIS OBJECT MOVE IN 15 S?

MKS SYSTEM

① NO CONVERSIONS NECESSARY



$$\sum F'_{sx} = ma_x$$

$$+45.31\text{ N} = 10 a_x$$

$$a_x = 4.531\text{ m/s}^2$$

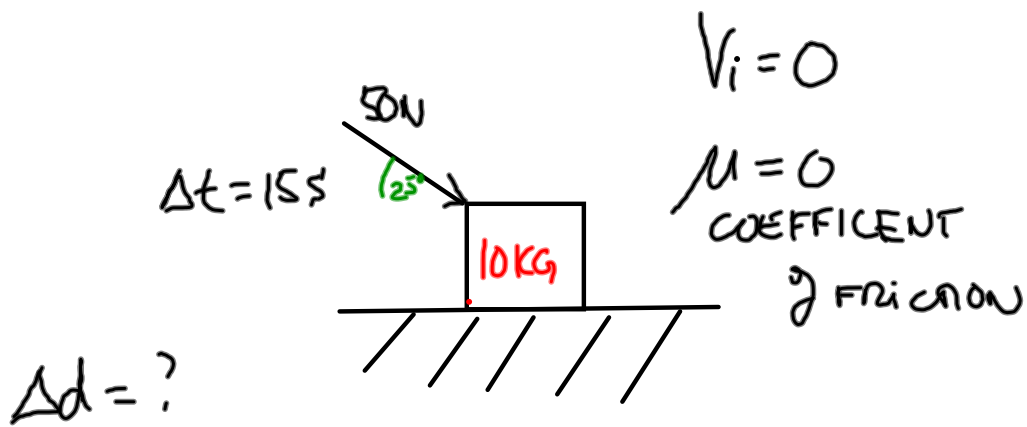
$$\Delta d = \cancel{v_i \Delta t} + \frac{1}{2} a \Delta t^2$$

$$\Delta d = \frac{1}{2} (4.531)(15)^2$$

$$\Delta d = 509.73\text{ M}$$

$$5062\text{ M}$$

$$562.5$$



NO UNIT CONVERSIONS ARE NECESSARY -

$$\sum F's = ma$$



CAN

$$50 \cos 25^\circ = \frac{?}{50}$$

$$? = 50 \cos 25^\circ$$

$$? = 45.32\text{ N}$$

$$\sum F's_x = ma_x$$

$$45.32 = 10 a_x$$

$$a_x = 4.532\text{ m/s}^2$$

$$\Delta d = \cancel{V_i \Delta t} + \frac{1}{2} a \Delta t^2$$

$$\Delta d = \frac{1}{2} 4.532 (225) = 509.85\text{ m}$$