



3.63m

$$W = f \Delta d$$

$$W = 802.5 \text{ N} (3.6322)$$

$$W = 2914.84$$

$$P = \frac{W}{t}$$

$$= \frac{2914.84}{5} = 582.968 \text{ Watts}$$

$$1 \text{ Hp} = 746 \text{ Watts}$$

$$\frac{582.968 \text{ Watts}}{746 \text{ Watts/Hp}} = .781 \text{ Hp}$$

$\frac{180 \text{ lbs}}{2.2 \text{ lbs/kg}} = 81.81 \text{ kg}$   
 $W = mg$   
 $W = 81.81 (9.81)$   
 $W = 802.5 \text{ N}$   
 $P_{\text{out}} = 582.7 \text{ Watts}$   
 $\text{HP} = 0.78$

$$\frac{180 \text{ lbs}}{2.2 \frac{\text{lbs}}{\text{kg}}} = 81.81 \text{ kg} \quad \text{Weight} = mg$$

$$(81.81)(9.81) = 802.5 \text{ N}$$

$$(802.5)(3.63) = 2913.08 \text{ J}$$

$$\text{work} = [F][\Delta d]$$

$$\text{power} = \frac{w}{t} \quad p = \frac{2913.08}{5}$$

$$\text{Power} = 582.6 \text{ watts}$$



$$746 \text{ watts} = 1 \text{ HP}$$

$$\frac{582.6 \text{ watts}}{746 \text{ watts/HP}} = .78 \text{ HP}$$