

WORK & Power

$$W = F \cdot d$$

Work Force
Distance

WORK: Energy transformed by force

Energy: ability to do work.

$$Power = \frac{Work}{Time}$$

Power is measured in W (watts)

T (time) is measured in s (seconds)

W (work) is measured in J (joules)

WORK example.

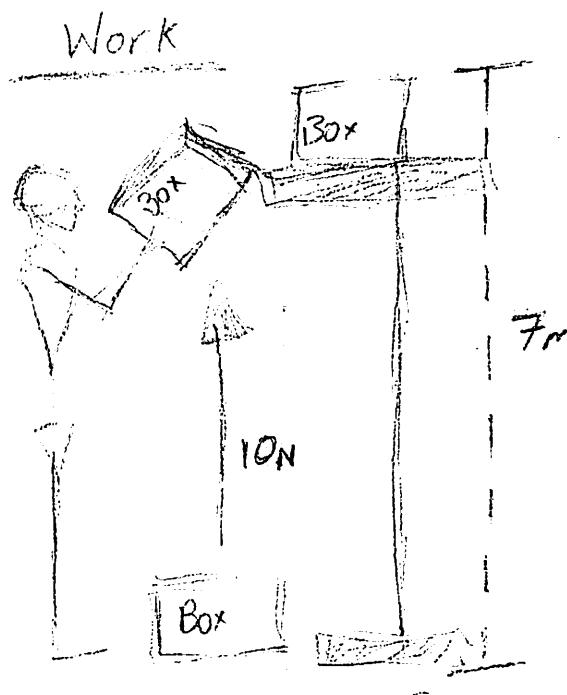
$$10N \rightarrow \boxed{\text{Box}} \xrightarrow{7m} \begin{array}{l} \text{Force} \\ W = 10N \cdot 7m \\ = 70\text{Nm} \end{array} \xrightarrow{\text{Distance.}}$$

Power example:

$$85\text{W} = \frac{W}{2.5\text{min}}$$

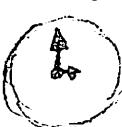
$$\begin{array}{ll} 85\text{W} = \frac{W}{150\text{s}} \\ \times 150 \quad \times 150 \end{array}$$

$$12750\text{J} = W$$



$$W = 70\text{J}$$

$$P = 85\text{W}$$



$$2.5\text{min}/150\text{s}$$

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(Bella) (M. 11) (G. 12) (S. 13)
(C. 14) (D. 15) (E. 16) (F. 17)
(G. 18) (H. 19) (I. 20) (J. 21)

100% (100%)
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