

23

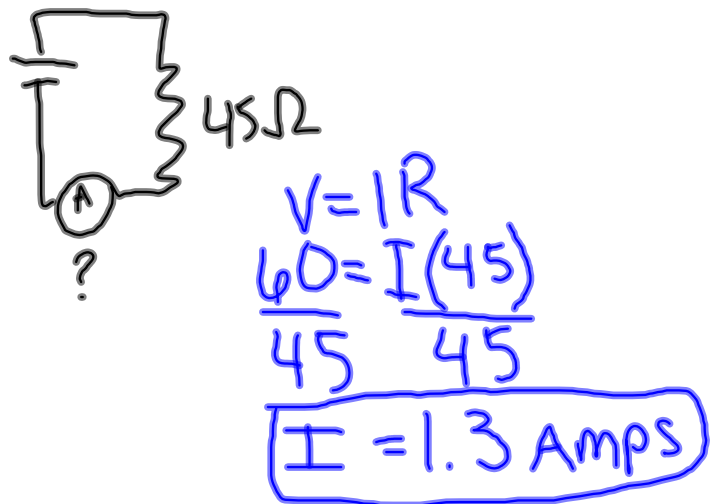
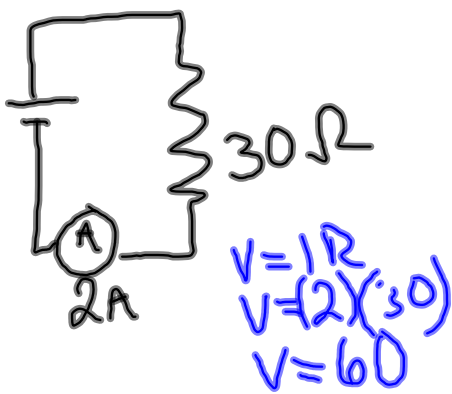
$$P_R \rightarrow Q = \frac{m}{\text{---}} \frac{q}{\text{---}} \Delta T$$

27

$$P_R \rightarrow p = mv$$

28

$$v = f \lambda$$

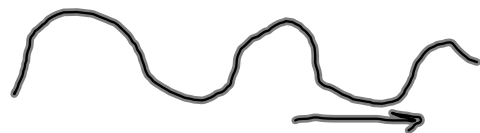


LONGITUDINAL

OOOOO →

ENERGY FLOW of WAVE
IS || TO FLOW of THE
MEDIUM.

TRANSVERSE



#29

ELECTROMAGNETIC WAVE

$$v \text{ for an EM wave} = c = 3 \times 10^8 \frac{\text{m}}{\text{s}}$$

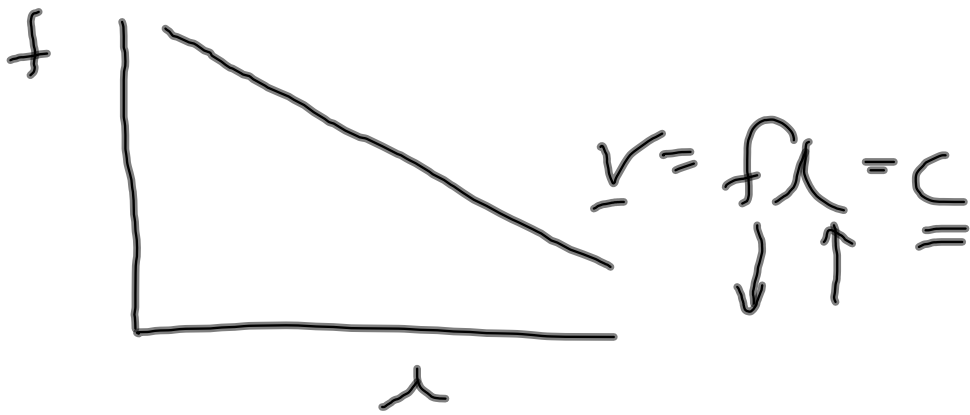
$$v = f \lambda = c$$

23 INTRODUCTION PHYSICS

$$\underline{\underline{\psi}} = m \int \Delta T$$

$$p = mv$$

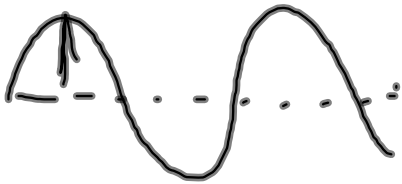
$$v = f\lambda$$



$$c = \underline{\underline{3 \times 10^8 \text{ m/s}}}$$

$\frac{J}{s} \rightarrow \text{WATT} \neq \text{CULOMBS}$

IN A TRANSVERSE WAVE THE MOTION OF
THE MEDIUM IS \perp TO THE MOTION OF
THE ENERGY OF THE WAVE.



LONGITUDINAL

~~→~~ MOTION OF THE MEDIUM IS \parallel TO
MOTION OF ENERGY

$$a = \frac{v_f - v_i}{\Delta t}$$

$$1.4 = \frac{26 - 20}{\Delta t}$$

$$1.4 = \frac{6}{\Delta t}$$

$$\frac{1.4}{1.4} = \frac{6}{\Delta t}$$

$$\frac{\Delta t(1.4)}{1.4} = \frac{(6) \cancel{\Delta t}}{\cancel{\Delta t} 1.4}$$

$$\Delta t = 4.3 \text{ s}$$

$$\Delta PE = mg \Delta h$$

