

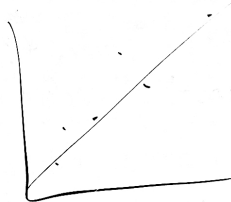
Do Now 9-24

What are some characteristics of a good graph.

labels, x-y axis,  
data points, line of best fit,  
title, units

$V = 2f$

Title



$v = \frac{\lambda}{T}$

labels

$y = mx + b$

$y = 2x$

X	Y
0	0
1	2
2	4
3	6

Independent variable

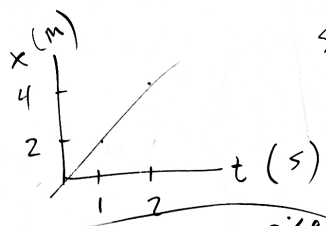
Thing you change in experiment.

Dependent variable

depends on the independent variable

Independent	Dependent

dependent ↑  
 Independent →

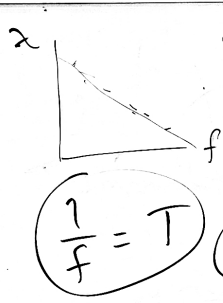


$$\text{Slope} = \frac{\Delta y}{\Delta x} \quad \begin{matrix} \text{rise} \\ \text{run} \end{matrix}$$

$$\text{slope} = \frac{\Delta x}{\Delta t}$$

$$\frac{4 \text{ m}}{2 \text{ sec}} = 2 \text{ m/s}$$

$$v = \frac{x}{t}$$



$$\text{slope} = \frac{\Delta \lambda}{\Delta f}$$

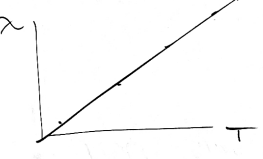
$$v = \lambda f$$

$$\frac{1}{f} = T$$

$$\frac{1}{T} = f$$

$$\text{slope} = \frac{\lambda}{T}$$

$$\frac{1}{T} = f$$



$$\lambda f = v$$

Agenda

- Review & finish CW 9-23
- Notes on graphs CW 9-24

Learning goal

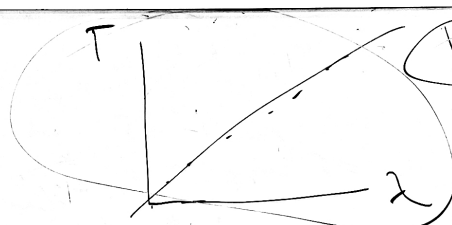
Students will be able to analyze & graph data associated with waves

Do Now 9-24

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Ob physics. Weebly.com



$$\text{slope} = \frac{\Delta T}{\Delta \lambda}$$

$$\frac{T}{\lambda} = \frac{1}{v}$$

$$v = \lambda f$$

$$v = \lambda \left(\frac{1}{T}\right)$$

$$v = \lambda f$$

↑ ↓

$$v = \frac{1}{\text{slope}}$$

$$f = \frac{1}{T}$$

$$v = \frac{\lambda}{T}$$

$$f = \frac{1}{T}$$

$$T = \frac{1}{f}$$

↑ ↓

λ ↑

T ↑