Medium - the material the wave travels through.

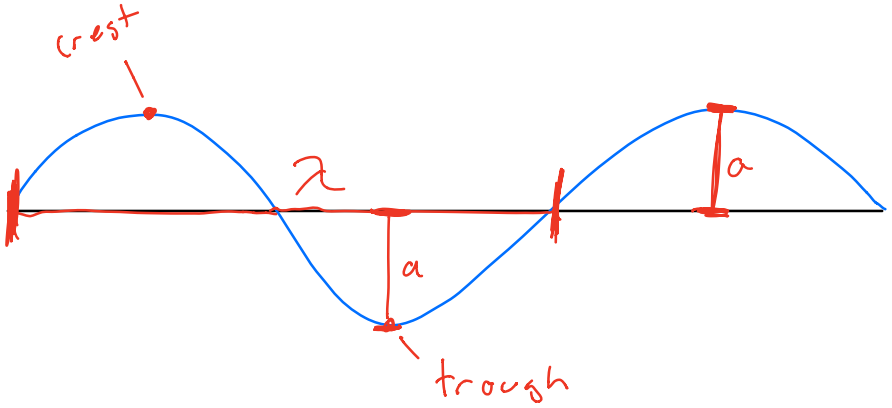
Crest - high point of a wave

Trough - low point of a wave

Amplitude - maximum displacement (from rest)

Wave length - distance between repeating points on a wave (crest to crest, trough to trough)

$(\lambda)_{lambda}$



Pulse - a single repeating wave.

Periodic - wave that repeats.

$$f = \frac{1}{T\,(s)}$$ Hertz Hz.

$$T\,(s) = \frac{1}{f}$$

frequency = $\frac{\text{cycles}}{\text{time}}$

Period (T) = $\frac{\text{time}}{\text{cycle}}$

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

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

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

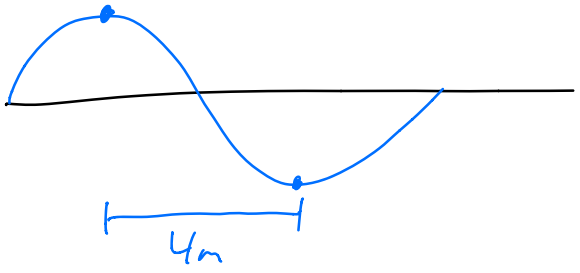
$$v = \lambda\left(\frac{1}{T}\right)$$

$v = \lambda f$ ← wave eq^n

$v = \lambda f$

$= 8\left(\frac{1}{12}\right)$

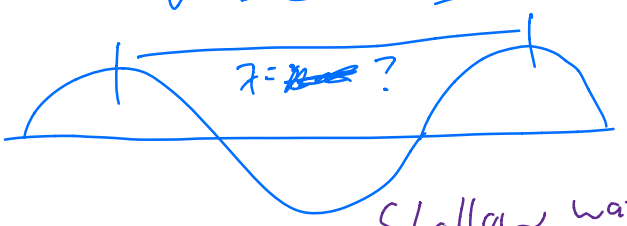
$= \frac{2}{3}\ \frac{m}{s}$



$T = 12_s$

4

$v \rightarrow$ @ 6 m/s



Shallow water

$v = \lambda f$

$4 = \lambda(3)$

$\frac{4}{3} = \lambda$

$1.33\ m = \lambda$

Deep water

$v = \lambda f$

$6 = 2f$

$\frac{6}{2} = f$

$3\ Hz. = f$