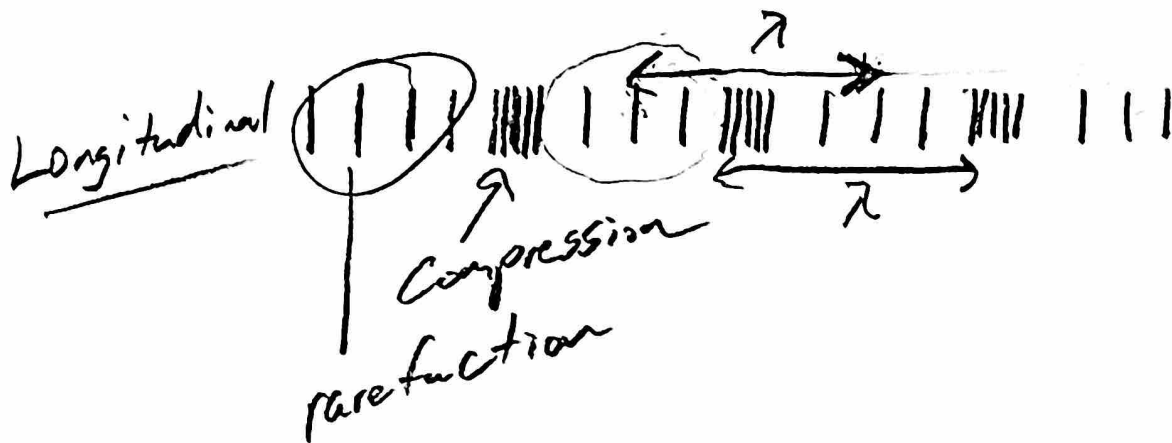
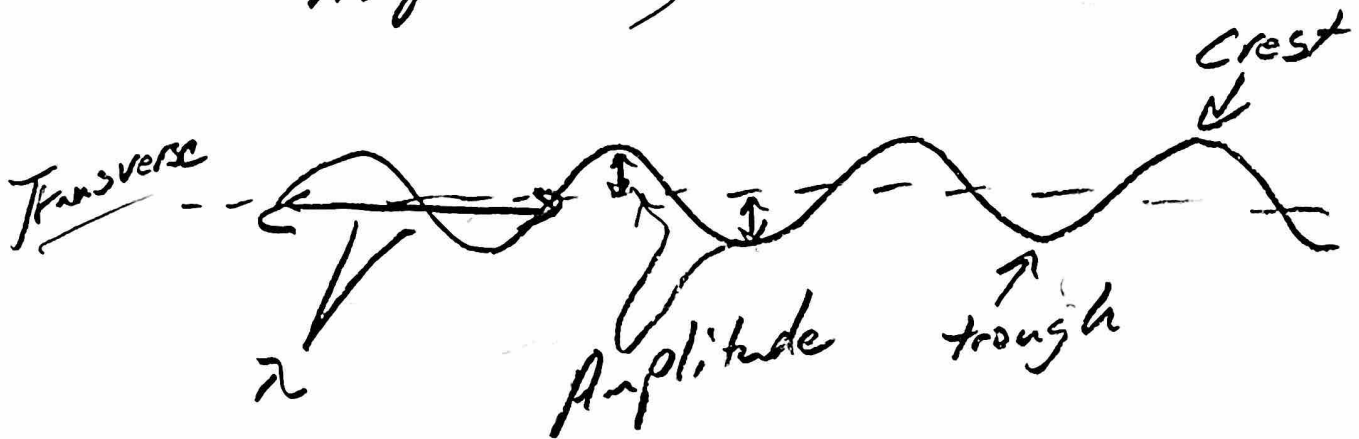
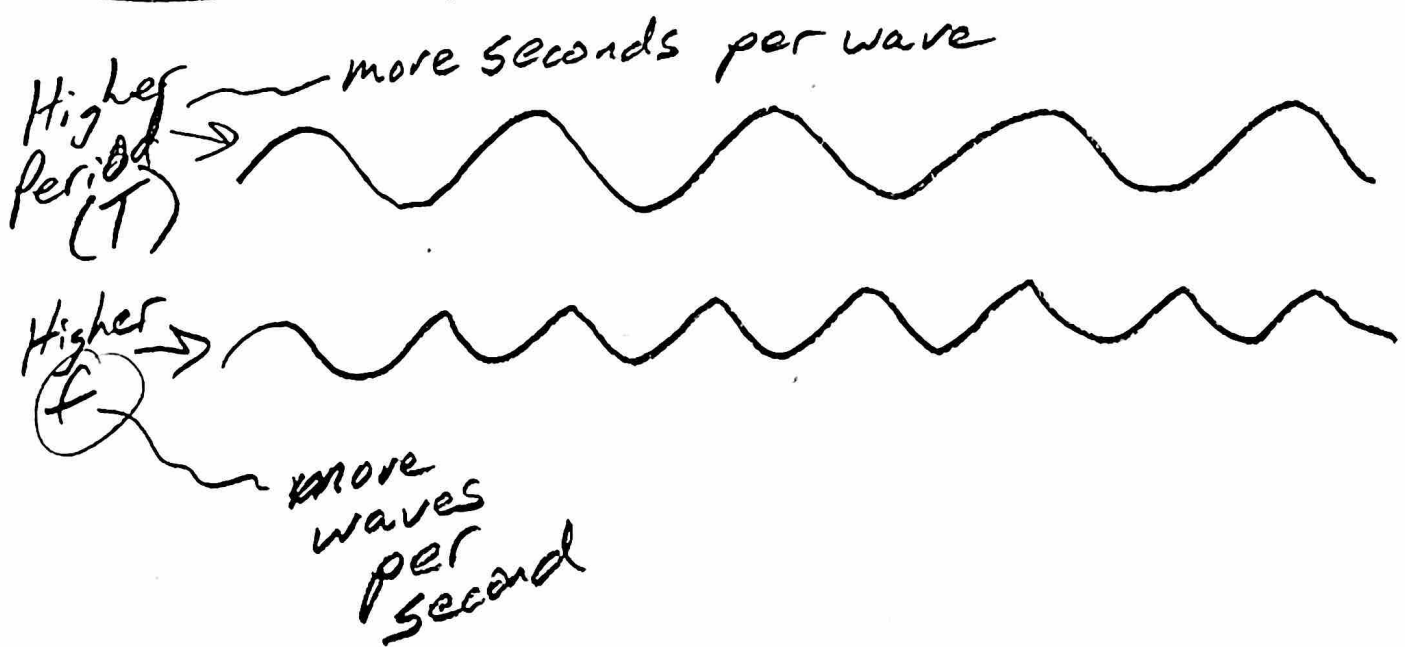


1. Draw and label the parts of a transverse wave and a longitudinal wave.

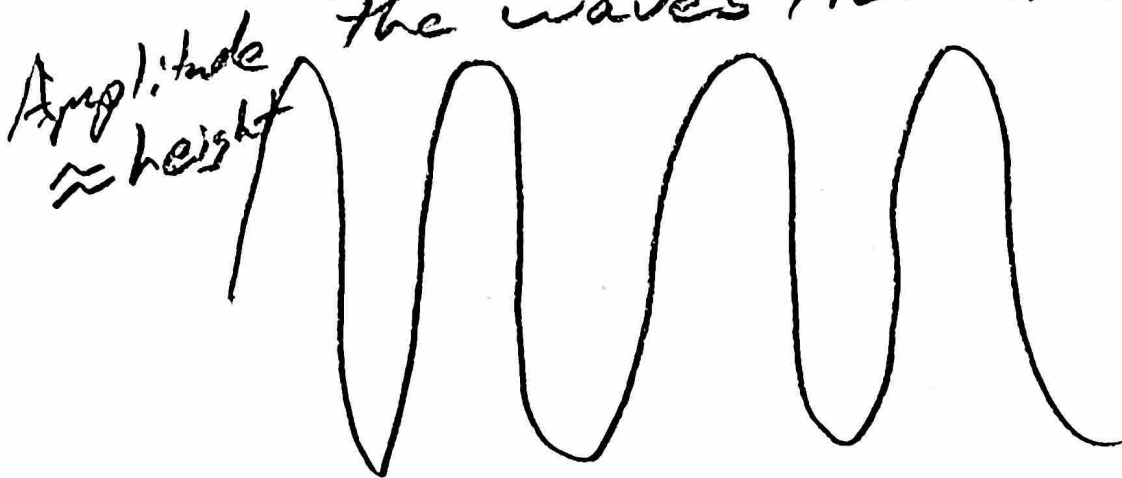
(wavelength, Crest, trough, compression, rarefaction, Amplitude), Label the wave.



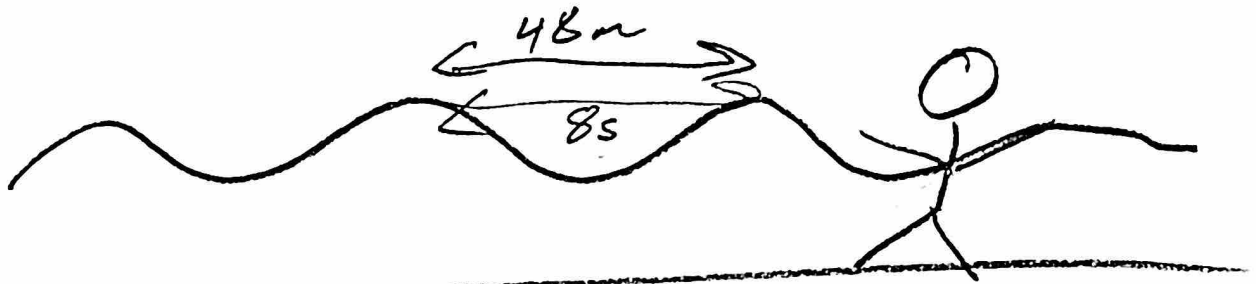
2. Draw 2 waves, and  
A) label the one with a higher frequency  
B) label the one with higher period
- 



3. Draw a wave with a higher amplitude than the waves from #2



4. Fred is at the beach



Fred gets splashed once every 8 seconds.

Fred is 30m from the shore, and he sees that a wave takes 5 seconds to reach the shore after passing him.

Find the waves' ...



$$f = \frac{\text{waves}}{\text{time}} = \frac{1 \text{ wave}}{8 \text{ sec}} = 0.125 \text{ Hz}$$

$$T = \frac{1}{f} = \frac{1}{0.125 \text{ Hz}} = 8 \text{ s}$$

$$v = \frac{30 \text{ m}}{5 \text{ s}} = 6 \text{ m/s}$$

$$\lambda = \frac{v}{f} = \frac{6 \text{ m/s}}{0.125 \text{ Hz}} = 48 \text{ m}$$

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

$$v = f \lambda$$

$$f = \frac{\text{waves}}{\text{time}}$$

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