

WHICH IS FASTER - 60 MPH or 10 M/s ?

60 MILES \rightarrow ? METERS

$$[60 \text{ MILES}] \left[\frac{5280 \text{ FT}}{\text{MILE}} \right] = (316800 \text{ FT}) \left[\frac{3.28 \text{ FT}}{\text{M}} \right]$$

$$\frac{3.28 \text{ FT}}{[M]}$$

$$[316800 \text{ FT}] \left[\frac{\text{M}}{3.28 \text{ FT}} \right]$$

$$\frac{[96,585.37 \text{ M}]}{(\text{HOUR})} \left[\frac{\text{HOUR}}{3600 \text{ S}} \right]$$

$$? \left[\frac{\text{SEC}}{\text{Hr}} \right] = \left[\frac{\text{Hr}}{60 \text{ MIN}} \right] \left[\frac{\text{MIN}}{60 \text{ S}} \right] = \left(\frac{\text{Hr}}{3600 \text{ S}} \right)$$

$$\rightarrow 26.83 \text{ M/s}$$

60 MPH vs 10 M/S

$$\left[\frac{60 \text{ Miles}}{\text{Hour}} \right] \left[\frac{5280 \text{ FT}}{(\text{Mile})} \right] = \left[\frac{316800 \text{ FT}}{\text{HR}} \right] \left[\frac{\text{M}}{3.28 \text{ FT}} \right] = \text{? M/S}$$

$$\left[96,585.36 \frac{\text{M}}{\text{HR}} \right]$$

3600s/HR

$$\left[96,585.36 \frac{\text{M}}{\text{HR}} \right] \frac{\text{HR}}{3600\text{s}} = 26.8 \text{ M/S}$$