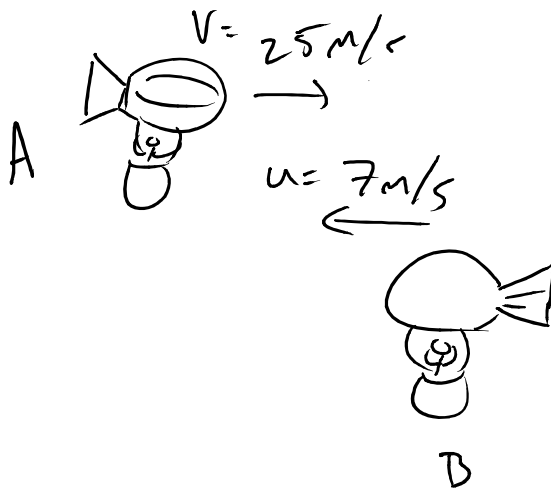


Relative Motion

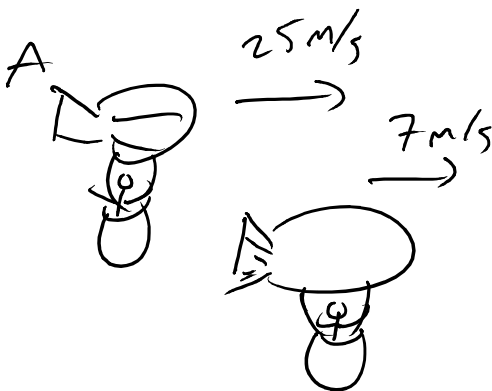
May 26, 2016

2:12 PM



What is the Relative Velocity of Airship A to Airship B

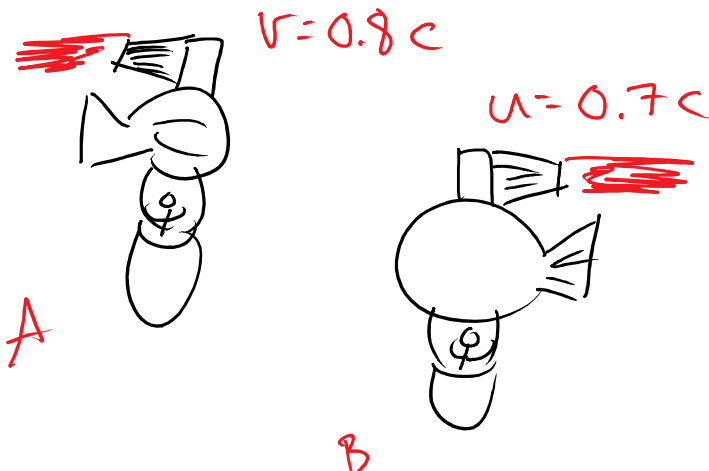
$$\begin{aligned} V_{\text{rel}} &= V - u \\ &= 25 - (-7) \\ &= 32 \text{ m/s} \end{aligned}$$



$$\begin{aligned} V_{\text{rel}} &= V - u \\ &= 25 - 7 \\ &= 18 \text{ m/s} \end{aligned}$$

The Speed of light is the Max Speed in the Universe.

$$c = 3.00 \times 10^8 \text{ m/s}$$



How fast is Airship A going relative to Airship B

$$\begin{aligned} V_{\text{rel}} &= V - u \\ &= 0.8c - (-0.7c) \\ &= 1.5c \end{aligned}$$



This is Not Allowed

This is where Special Relativity is used
to fix Classical Newtonian Physics.