Physics 111 - Lecture 5
Relative Velocity (Summary)

River Problem

\( \vec{V}_{BW} \): velocity of boat with respect to water

\( \vec{V}_{WE} \): velocity of water with respect to earth

\( \vec{V}_{BE} \): velocity of boat with respect to earth

\[ \vec{V}_{BE} = \vec{V}_{BW} + \vec{V}_{WE} \]

or more generally

\[ \vec{V}_{12} = \vec{V}_{13} + \vec{V}_{32} \]