HOMEWORK   6

Due: Tuesday, March 28

Problems: Theory of Relativity

(Grffiths, Section 12.1)

12.3, 12.4, and 12.8

Problem 6

The inertial coordinate frame S' moves in the x- direction with speed $v=0.9c$ relatively to another inertial frame S. A traveler is moving with velocity $u' = 0.5\,c\,\hat{e}'_x + 0.5\,c\,\hat{e}'_y$ in the frame S'. Determine the traveler's velocity in the frame S.