I'm in frame S, and you are in is in Frame S', which moves with speed V in the $+x$ direction.

An object moves in the S' frame in the $+x$ direction with speed v'_x. Do I measure its x component of velocity to be $v_x = v'_x$?

A. Yes
B. No
C. ???

ANNOUNCEMENTS

- Poster Rubric posted
  - Review because you will be using it.
  - Lowest and highest peer scores will be dropped
  - My score: 60%; Your (average score): 40%

I'm in frame S, and you are in is in Frame S', which moves with speed V in the $+x$ direction.

An object moves in the S' frame in the $+y$ direction with speed v'_y. Do I measure its y component of velocity to be $v_y = v'_y$?

A. Yes
B. No
C. ???

With Einstein's velocity addition rule,

$$u = \frac{u' + v}{1 + \frac{u'v}{c^2}}$$

what happens when v is very small compared to c?

A. $u \to 0$
B. $u \to c$
C. $u \to \infty$
D. $u \approx u' + v$
E. Something else

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what happens when u' is c?

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what happens when v is c?

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D. $u \approx u' + v$
E. Something else

Displacement is a defined quantity

$$\Delta x^\mu \equiv \left(x_A^\mu - x_B^\mu\right)$$

Is the displacement a contravariant 4-vector?

A. Yes
B. No
C. Umm...don't know how to tell
D. None of these.

Be ready to explain your answer.