

Answer on question #61623, Physics / Mechanics — Relativity

Question What is the unit vector \hat{a} in the direction of \mathbf{a} , where $\mathbf{a} = (200, 400, 600)$ m/s²?

Solution

$$\hat{a} = \frac{\vec{a}}{|\vec{a}|} = \frac{(200, 400, -600)}{\sqrt{200^2 + 400^2 + 600^2}} \approx (0.267, 0.535, -0.802)$$