



$$v = \frac{dx}{dt} = \frac{\cancel{\gamma}(dx + u dt)}{\gamma(dt + \frac{u}{c^2} dx)} = \frac{\frac{dx}{dt} + u}{1 + \frac{u}{c^2} \frac{dx}{dt}} = \frac{v + u}{1 + \frac{uv}{c^2}}$$