[lex160] Interstellar travel
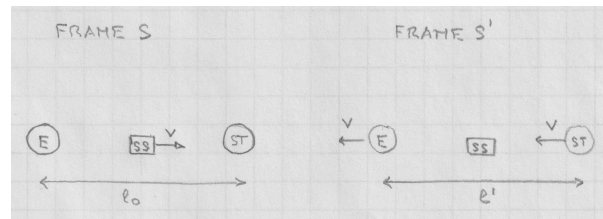
The distance from Earth to a star is 12 light-years. Their relative velocity is negligible.
(a) How fast (in units of c) must a spaceship travel so that it reaches the star in 12 years according to the clocks onboard?
(b) How long will the trip take according to the clocks on Earth?
(c) How many light-years is the distance between Earth and the star from the perspective of the cruising spaceship?

Solution: