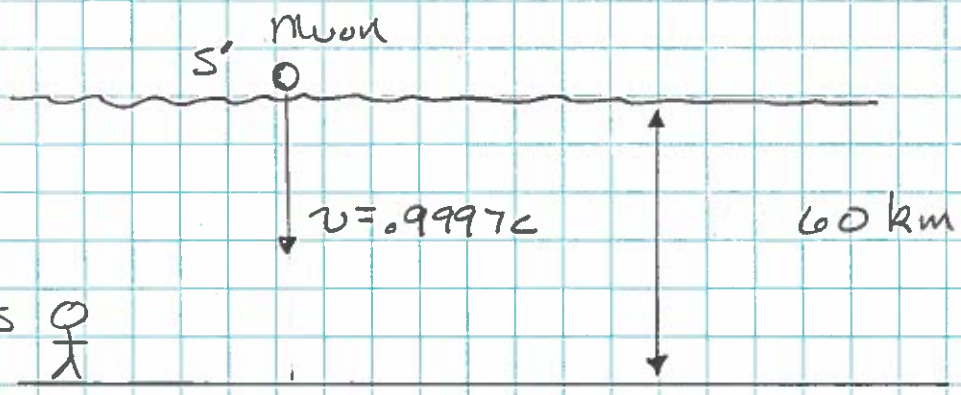

Observers in S (Earth) measure the proper length, $L_p = 60$ km

Observers in S' (muon) measure the contracted length

$$L = \frac{1}{\gamma} L_p$$

where $\gamma = \frac{1}{\sqrt{1 - v^2/c^2}} = \frac{1}{\sqrt{1 - (.9997)^2}} = 40.83$

$$\therefore L = \frac{1}{\gamma} L_p = 1.47 \text{ km}$$