On a beginner's slope, skiers can glide uphill to help them stop $\left(\theta=25^{\circ}\right)$. A skier of mass $m=70 \mathrm{~kg}$ is moving at a speed $v_{0}=8 \mathrm{~m} / \mathrm{s}$ near the bottom of the slope, and then glides another $L=6 \mathrm{~m}$ before stopping. Determine $\mu_{\mathrm{k}}$ for this up hill motion.


