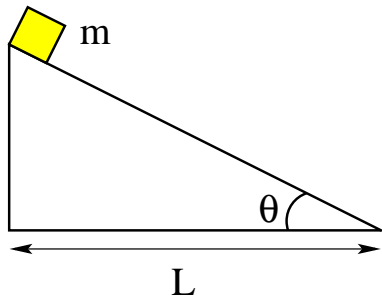


[mex100] The shortest path is not the quickest path

A block of mass  $m$  slides from rest down a ramp with base of fixed length  $L$  as shown. Friction is assumed to be negligibly small. Find the angle  $\theta$  for which the block arrives at the bottom of the ramp in the shortest time.



**Solution:**