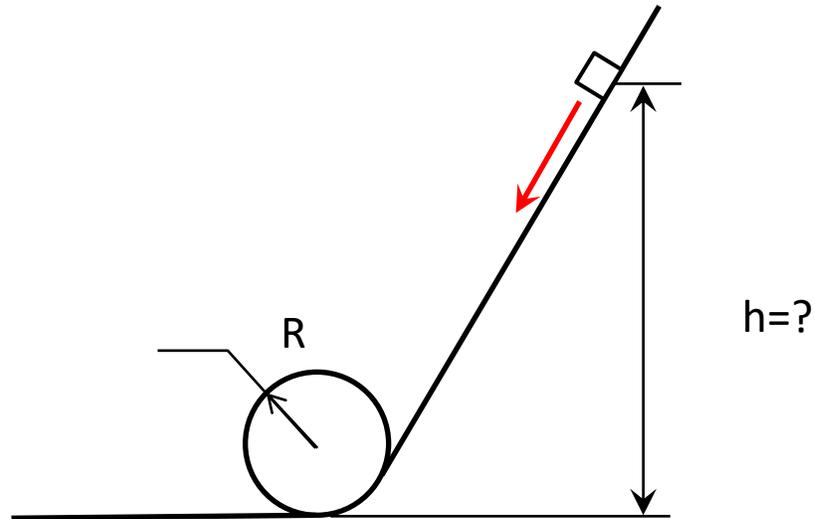


Homework 25

Roller coaster problem



An ice cube is sliding down the track with a vertical loop (see figure above). The radius of the loop is given.

1. Find the formula for the minimum initial height of the ice cube to go all way along the loop. Neglect the friction.
2. Explain what happens if the initial height is less than that found in the first part of the problem.