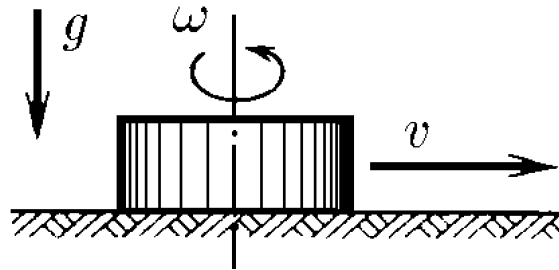


Homework 15.

Please think on the following problems:

1. Two pucks on a horizontal surface with friction were pushed with same initial velocity of the center of mass. One was spinning, the other was not. Which one will pass a longer distance? (To be clear: by the distance I mean displacement of the center of mass).



2. There are small dust particles in a cylinder with horizontal axis. Find a minimal angular velocity of the cylinder rotation at which the particles will not slide down along the cylinder wall (see picture below). Take friction coefficient $\mu=1$.

