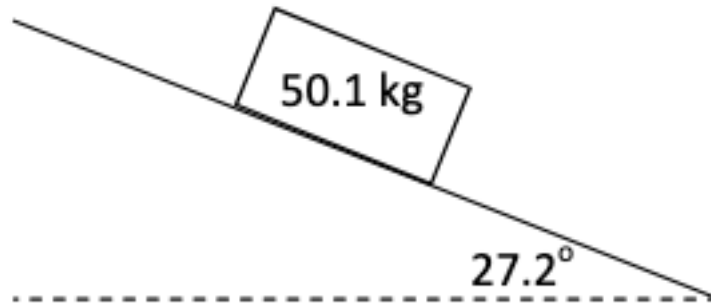


Use the diagrams below to answer the questions. Assume the block accelerates down the ramp unless explained otherwise. SHOW ALL WORK!

1. Determine the acceleration of the block below if the coefficient of static friction is 0.343.



- 2.

A 15.0 kg box is being pulled along level ground by a 75.0 N force that is directed at an angle of  $20^\circ$  above the horizontal. The coefficient of kinetic friction is 0.330. What is the acceleration of the box?

