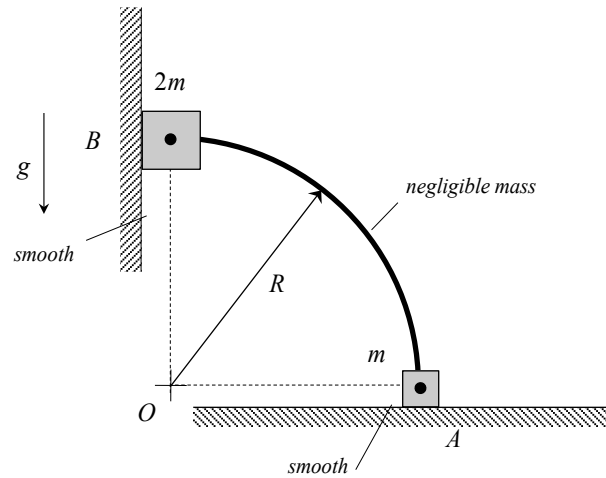# Homework H.4.E

Given: Blocks A and B (having masses of m and $2m$, respectively) are constrained to move along the smooth surfaces shown in the figure below. Member AB, in the shape of a quarter-circle arc, connects blocks A and B, with AB having a mass that is negligible compared to the masses of A and B. At the position shown, when the center O of the circular arc AB is directly below block B, the system is released from rest.

Find: For this position, determine the acceleration of blocks A and B on release.

HINT: Note that AB is a two-force member. What does this say about the direction of the reaction forces on blocks A and B due to member AB?