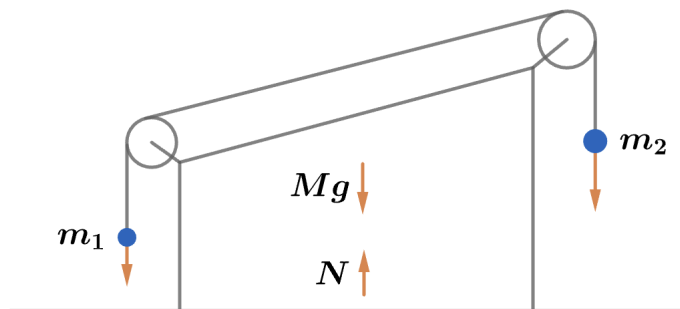


2018A F=ma Exam: Problem 5

Kevin S. Huang



Let's consider the masses and inclined plane combination as our system. Since there is no external force in the horizontal direction, we know the center of the mass does not move along the ground. The masses only move in the vertical direction so x_{CM} is determined by the location x_p of the plane. Therefore, it does not move so the answer is E.