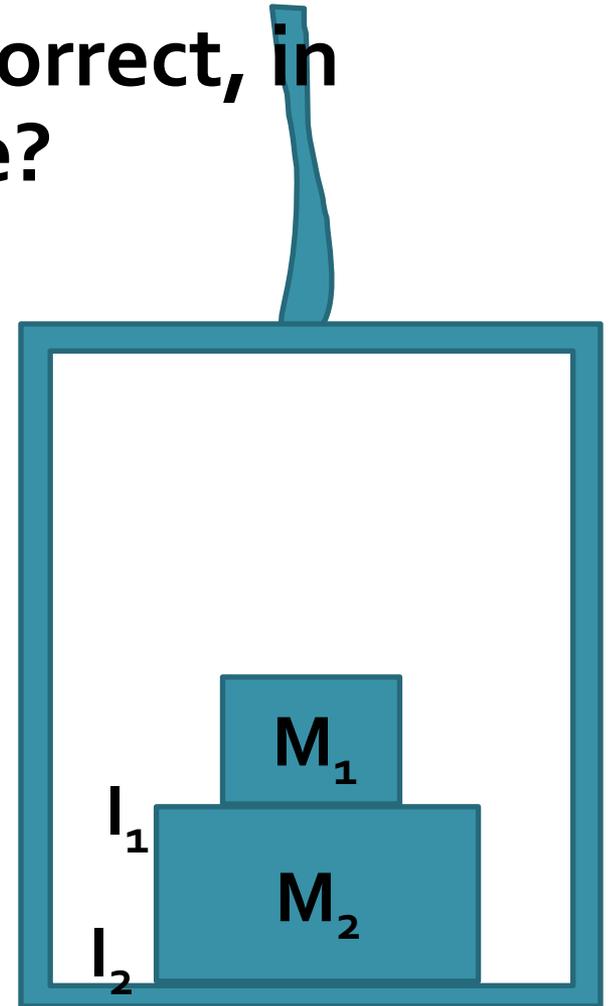
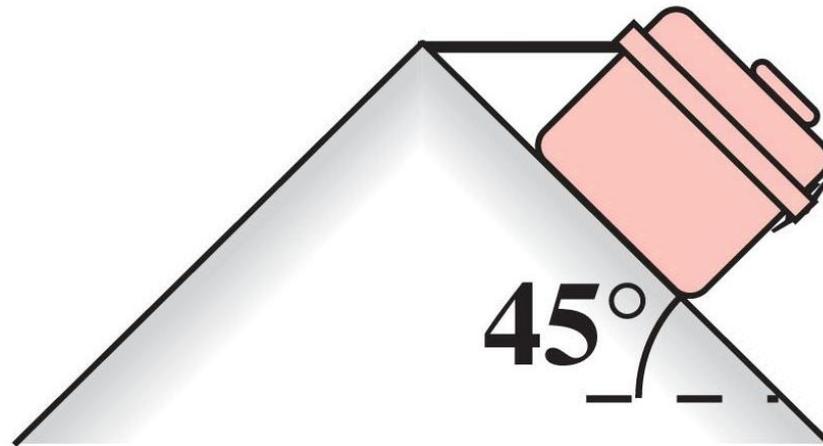


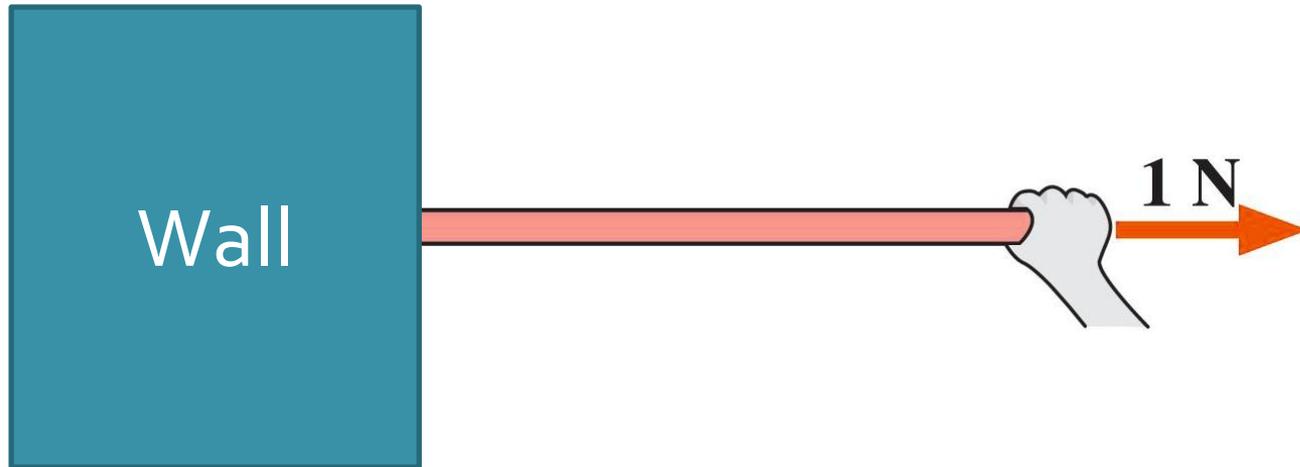
- Clicker Q: An elevator is falling down with an acceleration a ($< g$). Which of the following statements is incorrect, in comparison to the $a=0$ case?

- A. The normal forces acting on interface I_1 (or I_2) decrease by a factor $(g-a)/g$
- B. The normal forces acting on interface I_1 (or I_2) remain unchanged
- C. Weights remain the same
- D. Apparent weights change





- A roofer's toolbox rests on an essentially frictionless metal roof with a 45° slope, secured by a horizontal rope as shown. Is the rope tension (A) greater than, (B) equal to, or (C) less than the box's weight?



- You are pulling a rope that is attached to the wall, with a 1 N force. The rope tension and the force exerted by the wall on the rope are, respectively
 - A. $1\text{ N}, 1\text{ N}$
 - B. $1\text{ N}, 2\text{ N}$
 - C. $2\text{ N}, 2\text{ N}$
 - D. $1\text{ N}, 0\text{ N}$