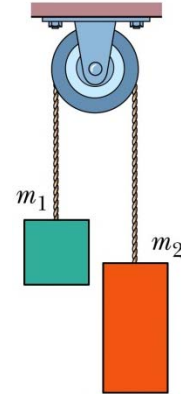


Ch. 4 Worksheet

1. Two blocks are connected by a cord that passes over a frictionless pulley. The arrangement is known as Atwood's machine. One block has mass $m_1 = 1.30$ kg; the other has mass $m_2 = 2.80$ kg. What are the magnitude of the block's acceleration and the tension in the cord?



2. A force of magnitude 12 N is applied to a box of mass $m_2 = 1.0$ kg. The force is directed up a plane tilted at an angle of 37° . The box is connected by a cord to another box of mass $m_1 = 3.0$ kg. The floor, plane, and pulley are frictionless, and the masses of the pulley and cord are negligible. What is the tension in the cord?

