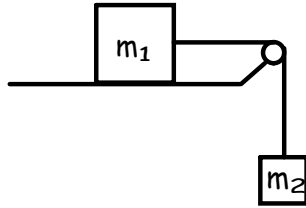


Section 2.3 Strings and Pulleys

1. Assume the desktop is frictionless. Compute the acceleration of the system and the tension in the string.

$$m_1 = 120.0 \text{ kg}$$

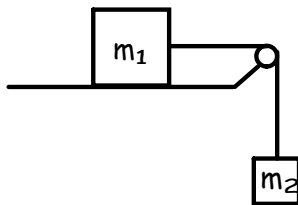
$$m_2 = 60.0 \text{ kg}$$



2. Assume that the coefficient of friction between the desktop and the 120.0 kg block is 0.700. Compute the acceleration of the system and the tension in the string.

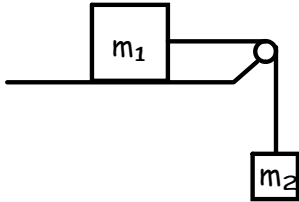
$$m_1 = 120.0 \text{ kg}$$

$$m_2 = 60.0 \text{ kg}$$

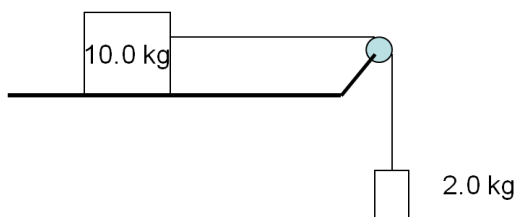


3. Assume that the coefficient of friction between the desktop and the 120.0 kg block is a realistic 0.400. Compute the acceleration of the system and the tension in the string.

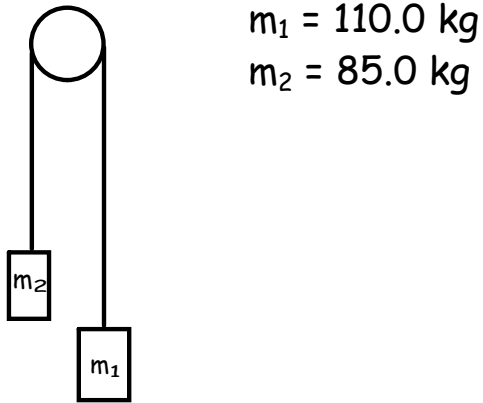
$$m_1 = 120.0 \text{ kg}$$
$$m_2 = 60.0 \text{ kg}$$



4. What coefficient of friction would prevent the system from moving?



5. If the pulley wheel provides no friction, determine the acceleration of the system and the tension in the string.



6. Assuming that the tabletop is frictionless determine the acceleration of the system and the tension in the two strings.

