

Name:

Date:

Period:

Friction Practice Problems

1. A 75-kg bookcase is pushed across a carpeted floor. The static coefficient of friction is 0.8 and the kinetic coefficient of friction is 0.6.

(a) How much force is required to start the bookcase moving?

(b) If that same force is continually applied to the bookcase after it starts moving, what will be its acceleration?

Name: _____

Date: _____

Period: _____

2. Consider the modified Atwood Machine shown with $m_1 = 4$ kg and $m_2 = 3$ kg. If the coefficient of kinetic friction between the top box and the surface of the table is 0.2, what will be the acceleration of the system?

