

Physics 11 Unit 2 – Worksheet #2 – Normal Force and Friction

Name: _____

1. A 4.3 kg block is sitting on a flat table. Find the normal force.

2. A 2.3 kg box is sitting on a desk. A string is pulling the box straight up with a force of 8.5 N. Find the normal force.

3. A book is being pulled across a smooth table at a steady speed. The book has a mass of 1.2 kg. The coefficient of friction between the table and the book is 0.31
Find the friction force on the book.

4. A 2.3 kg box is sitting on a table. The coefficient of friction between the table and the box is 0.4. The box is being pulled to the right with a 5 N force. Find the force of friction on the box. Will the box move?

5. A 36 kg sofa is being pulled with a 200 N force to the right. The coefficient of friction between the sofa and the floor is 0.48. What is the friction force on the sofa? Will the sofa move?

Harder Problems

6. A 4.5 kg box is being pulled to the right by a 30 N force at 25 degrees above the horizontal. The coefficient of friction is 0.6. Will the block move?