Name: _____ **Date:** _____ **Review Physics**

Inclined Planes and Friction

Directions: Read each statement carefully, then choose the best answer for that statements.

_____ 1. The force resistant to the relative motion is …

a) friction
b) terminal
c) gravity
d) normal

_____ 2. The friction between two objects in motion …

a) static friction
b) kinetic friction
c) coefficient of friction
d) none of these

_____ 3. The force perpendicular to the plane is …

a) friction
b) terminal
c) gravity
d) normal

_____ 4. The ratio between the friction force and the normal force is the …

a) static friction
b) kinetic friction
c) coefficient of friction
d) none of these

_____ 5. The sum of all the forces on an object is the …

a) static friction
b) kinetic friction
c) coefficient of friction
d) net force

_____ 6. The friction between two objects at rest is …

a) static friction
b) kinetic friction
c) coefficient of friction
d) none of these

Friction

SOLVE. Show your work**.**

_____ 1. A smooth wooden block is placed on a smooth wooden tabletop. A force of 14.0 N is necessary to keep the 40.0 N block moving at a constant velocity.

a) What is the coefficient of kinetic friction?

b) If a 20.0 N weight is placed on the block, what force would be needed to keep the block and weight moving at a constant velocity across the table?

Inclined Plane

DIRECTIONS: Solve the following using a sketch and show your work.

_____ 2. A block whose mass is 47.0 kg rests on a plane that is inclined 43° with the horizontal.

_____

a) If the coefficient of static friction is 0.800, will the block slide down the plane?

b) Find the acceleration of the block down the plane.

"Leadership is practiced not so much in words as in attitude and in actions." -- Harold S. Geneen