

Objects on Inclined Planes – continued

Example 5: Consider a 5.0 kg object placed on an inclined plane with a 52° angle of inclination. The coefficient of static friction between the object and the surface of the inclined plane is 0.21 and the coefficient of kinetic friction is 0.17. Furthermore, this object is being pushed by 85 N [Up the plane 70° into the plane]. What is the object's acceleration?