

Frictional Force Examples

Name: _____

Date: _____

1. To your extreme dismay, your 1000 kg car breaks down on the side of the road. You push the car with 600 N of force so that that it moves at a constant speed. What is the force of friction between the tires and the road? What is the coefficient of friction?



2. Two people are pushing a 50 kg box across the ground. One is pushing with a force of 200 N [right] and the other is pushing with a force of 15 N [left]. The coefficient of friction is 0.15. Determine the acceleration of the box.



3. A 23 kg shopping cart is being accelerated at 1.5 m/s^2 [right]. The forces acting on the cart are as follows. One force is pushing with 110 N [right]. Another force is pushing with 60 N [right]. A third force is pushing down with 10 N of force. Determine the coefficient of friction between the cart and the ground.

