

Name _____
Regents Physics
Period _____

Date _____
Forces 1D WS 3R
Mr. Moy

Everyday Forces

1. Compared to the force needed to start sliding a crate across a rough level floor, the force needed to keep it moving is
2. When a 12 Newton horizontal force is applied to a box on a horizontal tabletop, the box remains at rest. The force of static friction acting on the box is
3. A desk with a mass of 65.0 kg and wooden legs on a wooden floor. Calculate how much force someone must apply in a direction horizontal to the surface of the floor to get the desk moving.
4. Miles Tugo exerts a 36 N horizontal force as he pulls a 54 N sled across a cement sidewalk at constant speed. What is the coefficient of friction between the sidewalk and the metal sled runners? [Hint: What does constant speed tell us?]
5. An astronaut wearing his spacesuit has a mass of 105.7 kg and a weight of 1037 N on earth. He travels to Neptune where the acceleration due to gravity is 14.07 m/s^2 . After suiting up to explore, he stands by the portal, surveying the landscape. Calculate the normal force exerted by the floor.