**Physics 11 Unit 3 Review For Final Exam**

1. What is the force of gravity on a 90 kg person? What is the weight of the person?
2. If a person experiences 637N force of gravity on Earth’s surface, what is the person’s mass?
3. A 75 kg person would experience a force of gravity of 127.5 N on the moon. What is the gravitational field strength on the moon?
4. What is the force of friction on a wagon’s wheels if it takes 30N to move it at a constant speed across a bumpy path?
5. A 10 kg box of candy rests on a floor with a coefficient of static friction of 0.30. What force is needed to move the box?
6. The coefficient of kinetic friction between a steel block and an ice rink surface is 0.0100. If a force of 24.5 N keeps the steel block moving at a steady speed, what is the force of gravity on the block?
7. A 48 N cart is pulled across a concrete path at a constant speed. A 42 N force is required to keep the cart moving. What is the coefficient of kinetic frictions between the path and the cart?
8. What is the applied force on a spring when it is stretched 20 cm and the spring constant is 3.2?
9. A 2.5 kg mass stretches a spring 10 cm. how far will the spring stretch when it supports 5.0 kg?
10. The slope of a linear graph that represents the force of gravity vs. the stretch of a spring in cm gives you what constant value?