

Name: _____

ES 105 Lecture

In Class WS #2 – Motion of Objects (5 pts – ½ pt each) – circle the right answer or fill in blank

- 1) Aristotle would have considered a falling rock to be what kind of motion? Natural or Violent
- 2) Which has the greater inertia, a 1 kg sample of lead or a 1 kg sample of aluminum?
A) Lead
B) Aluminum
C) They are the same
- 3) A kilogram is a measure of an object's
A) weight. B) force. C) mass. D) gravity. E) center of mass.
- 4) Your weight is
A) your mass.
B) the gravitational attraction between you and the Earth.
C) a property of mechanical equilibrium.
D) the same in all locations.
- 5) A 1-kg mass at the Earth's surface weighs about
A) 1 N. B) 5 N. C) 10 N. D) 12 N. E) none of these
- 6) An object weighs 30 N on Earth. A second object weighs 30 N on the Moon. Which has the greater mass?
A) the one on Earth
B) the one on the Moon
C) They have the same mass.
D) not enough information to say
- 7) An object is pulled northward with a force of 20 N and southward with a force of 15 N. The magnitude and direction of the net force on the object is _____.
- 8) Hang from a pair of gym rings and the upward support forces of the rings will always (circle one)
A) each be half your weight.
B) each be equal to your weight.
C) add up to equal your weight.
- 9) If you push a box across the floor at a constant velocity, the friction force must be
A) More than your push B) Less than your push C) equal to your push
- 10) A 250-kg bear grasping a vertical tree slides down at constant velocity. The friction force between the tree and the bear is how many Newtons? _____.