1. I have read sections 1-5 of Chapter 5, or their equivalent, dealing with Newton's first two laws of motion. (a) True, (b) false.

2. To two figure accuracy, 1 kilogram = 2.2 pounds. (a) True, (b) False.

3. 1 N = (a) 1 kg m/s, (b) 1 kg m^2/s^2, (c) 1 kg m/s^2, (d) 1 kg^2 m^2/s, (e) 1 kg^2 m^2/s^2.

4. A weak elongating force is applied to the end of an attached spring. The resulting displacement in the end of the spring is (a) directly proportional to the force, (b) inversely proportional to the force, (c) directly proportional to the force^2, (d) unrelated to the force.

5. Strictly speaking, the force measured by a set of bathroom scales upon which a person is standing is (a) the person's weight, (b) the upward normal force exerted on the person by the scales, (c) the downward force exerted by the person on the scales, (d) the upward force exerted on the scales by the floor upon which they sit, (e) the upward force exerted by the person on the earth.

6. In magnitude, all of the mentioned forces in the last question, save one, are equal. Which is the exception?

7. The number of fundamental forces in nature is (a) one, (b) two, (c) three, (d) four, (e) five.

8. In our macroscopic experiences the number of fundamental forces we directly encounter is (a) one, (b) two, (c) three, (d) four (e) five.

9. Which of the following has a non-zero net force acting upon it? (a) A jetliner cruising overhead at a constant 520 mph in a fixed direction as it loses altitude at a fixed rate of 40 ft/s. (b) a car traveling northward on I-15 at 75 mph. (c) a ball on the end of a string, moving in a horizontal circle at a constant speed of 25 ft/s, (d) all of the preceding, (e) none of the preceding.

10. At various points on the surface of the earth the gravitational acceleration, g, (a) is everywhere identical, (b) exhibits imperceptibly small variations (theory tells us variations occur, but they are so small we cannot measure them), (c) exhibits small, but measurable variations, (d) exhibits substantial variations.