**Physics**

**Group Quiz 4.1 - Newton's Second Law**

Name

Show your work, round to about three total digits, circle your answers, and label them with units. Use the convention that up is positive.

1. What is the mass of an object that accelerates at 3.50 m/s/s when there is a net force of 67.0 N acting on it?

2. What is the mass of an object that weighs 889 N on earth?

3. What is the acceleration of a 12.0 kg mass with a net force of 68.0 N acting on it??

4. A net force of 64.5 N accelerates a baseball from rest to 35.0 m/s in a distance of 1.31 m. What is the mass of the baseball?

5. If there is a net force of 57.0 N on a 14.8 kg mass initially at rest, what would be its displacement 13.0 s later?