Force, Time, and Mass

Name _____ Class _____ Date _____

Directions: Solve the following problems. Make sure that you use your formulas, show your work, and answer the problems with the correct units.

1. Harry is traveling at 25m/s2 on a sled. Their total mass is 85kg. What force is needed to make the sled move?

2. Nola is driving is pushing her wheelbarrow to the garden. She needs to harvest her tomatoes to can. She is moving at 15m/s2, and her wheelbarrow has a mass of 35kg. How much force will Nola have to use to push her wheelbarrow?

3. Florrie is driving her new bike down the road. The car has a mass of 250kg, and she is travelling at an acceleration of 15m/s2. How much force will Florrie have to use to move her bicycle?

4. William is mowing his yard with his new lawn tractor. The lawn tractor has an acceleration of 5m/s2 with a force of 75N. What is the mass of William's lawn tractor?

5. Christine loves to plant pretty flowers in her garden. She uses a red wagon to pull around her things. If the wagon has an acceleration of 2m/s2 and a force of 12N; what is the mass of the wagon?

6. Carlos plans to go skateboarding at the park today. He has an acceleration of 25m/s2 with a force of 150 newtons (N). What is his mass?