Group Quiz 5.2 Name_____

1. A person exerts 54.0 N horizontally on a 183 kg cart initially at rest. How far have they pushed the cart when it reaches a speed of 3.50 m/s?

2. Natalie exerts a force of 85.0 N for a distance of 31.0 m on the level speeding up a 850. kg car from rest. The car then rolls up an incline. What elevation has the car gained when it has a velocity of 1.50 m/s? (Neglect friction)

3. A 480. kg Rollercoaster car at rest on top of a 3.50 m tall hill is sped up by a force of 7200 N for a distance of 2.50 m. The rollercoaster is later observed to be going 9.50 m/s at some elevation on the track. What is the height of the car when it is going 9.50 m/s?