Name _____ Period _____

Natural Physics Newton's 2nd Law Problems

1. A 83 kg box is lifted so that it accelerates up, starting from rest and ending at 3.5 m/s 2.2 meters later. What is the pulling force on the box? ans 1044 N

2. A child in a wagon have a combined mass of 46.2 kg. You attach a scale to the wagon handle and measure that it takes 23 N to keep it moving at a constant velocity on level ground. If you want to start from rest and get to 8.3 m/s in 3.4 seconds what force must you apply to the wagon? ans 136N