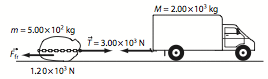
1. A 110 kg motorbike carrying 50.0 kg rider coasts to a stop in a distance of 51 m. It was originally traveling 15 m/s. What was the stopping force exerted by the road on the motorbike and rider? (HINT: start with kinematics)

1. A truck of mass 2.00 x 103 kg is towing a large mass boulder of mass 5.00 x 102 kg using a chain (of negligible mass). The tension in the chain is 3.00 x 103 N. And the force of friction of the boulder is 1.20 x 103 N.
   1. At what rate will the boulder accelerate? (Hint: Start with Dynamics!)
   2. How far will the boulder move in 3.0 s, starting from rest?



Fluffy the cat slides freely down the long porcelain cat slid

1. (-3.5 x 102 N) 2. a. (3.60 m/s2) b. (16 m)