Name _____ Date _____ Period _____

Acceleration Practice Problem Set 2

Answer the following questions on a separate sheet of paper. Remember the steps in solving physics problems.

1. An airplane starts from rest and undergoes a uniform acceleration of +3.00 m/s^2 for 30.0 seconds before leaving the ground. What is its displacement during the 30.0 seconds?

2. A jet plane traveling at 88.0 m/s lands on a runway and accelerated uniformly to rest in 11.0 seconds. Find:
   a. Its acceleration.
   b. The distance traveled during this time.

3. The Tokyo express in uniformly accelerated from rest at +1.00 m/s2 for 1.00 minute. How far does it travel during this time?

4. Starting from rest, a racing car has a displacement of 200. m in the first 5.00 seconds of uniform acceleration. What is the car's acceleration?

5. In an emergency, a driver initially traveling at 21.0 m/s brings a car to a full stop in 8.00 seconds.
   a. What is the cars acceleration?
   b. How far does it travel before stopping?