Name: Date: Period:

Kinematics #1

1. A car is initially travelling at 21 m/s. If it travels 615 m in 9.2 s, what is its acceleration?

2. A cyclist is going up a hill and slows down at a rate of -5.8 m/s^2 over 10 m. At the end the cyclist is traveling at 2.3 m/s. What was the speed of the bicycle before it got to the hill?

3. A train starting from rest accelerates for 58 s at a rate of 0.42 m/s^2.
   (a) What is the train's final velocity?

   (b) How far would the train have traveled in that time?