

Name \_\_\_\_\_

**CALCULUS JOURNAL**  
**RECTILINEAR MOTION & NEWTON'S METHOD**

1. The mathematical relationship between position, acceleration, and velocity is:
2. Velocity and acceleration found by using the derivative are referred to as \_\_\_\_\_  
because they find velocity and acceleration at \_\_\_\_\_.
3. (a) In rectilinear motion, you can determine possible turning points by \_\_\_\_\_  
\_\_\_\_\_  
(b) You can determine what direction an object is moving in by \_\_\_\_\_  
\_\_\_\_\_  
(c) An object will slow down if \_\_\_\_\_  
and will speed up if \_\_\_\_\_.
4. To determine the times when an object is speeding up or slowing down:
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
5. To find the total distance traveled by an object in motion:
  1. Find the object's \_\_\_\_\_ at all \_\_\_\_\_ and \_\_\_\_\_.
  2. \_\_\_\_\_
6. (a) The purpose of Newton's method is \_\_\_\_\_  
\_\_\_\_\_  
(b) The formula for Newton's method is \_\_\_\_\_.