

Name: \_\_\_\_\_

Period: \_\_\_\_\_

**HWUnit6:4 —**  
**Mr. Murray, IPC**  
**cstephenmurray.com**

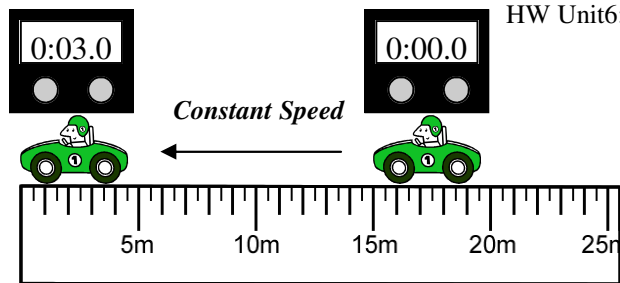
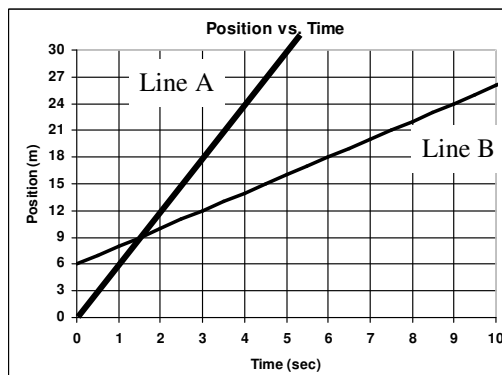
**Assigned: Fri., 1/12 and Tues., 1/16**  
**Due: Wed., 1/17 and Thurs., 1/18**

*Remember: for ALL word problems you MUST follow all 4 steps: Assign Variables; Give the Formula; Put in Numbers and Solve; Give Answer with Units.*

1. A car travels 60 mph for 3 hours. How far did the car go?
2. A 25 kg object is accelerating at  $3 \text{ m/s}^2$ . How big a force is acting on the object?

3. A car is going 20 m/s. How far does it travel each second?
4. If an object accelerates  $5 \text{ m/s}^2$ .
  - A. If it starts at rest, what is its velocity after 1 second?
  - B. What is its velocity after 2 seconds?
5. A car travels 10 m in 2 seconds. The car then accelerates for 5 seconds. After the acceleration it travels 90 m in 3 seconds. Find the acceleration of the car. (*Use the example at the bottom of the Acceleration notes.*)

6. Which Object starts farther away?
7. Which line reaches 24 m away first?
8. Where is Object A after 3 seconds?
9. Where is Object B after 3 seconds?
10. Which object is moving faster?
11. Find the slope of Object B.



12. What is the velocity of the above car? (*show steps*)

13. Where was the above car when the timer read 1 second?  
(Use the speed you found to figure this out).
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