

Name: _____

HWUnit6:2 — Acceleration

Assigned: Mon., 1/8 and Tues., 1/9

Period: _____

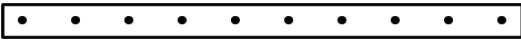


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Due: Wed., 1/10 and Thurs., 1/11

1. Using your “How to Solve Word Problems” page solve this problem: *A person pushes with 4 N for 6 meters. How much work did they do on the object?* (For ALL word problems you will lose points if you don’t follow the steps—including writing a variable list!)
2. If $p = mv$, what does $v = ?$ (Solve for v)
3. If $S = \Delta D / \Delta T$, solve for ΔD :
4. How are speed and velocity different?
5. How are scalars and vectors different?
6. ...going 4 m/s east: scalar or vector?
7. For an object to accelerate it must change _____ or _____.
8. Accelerating? (Y or N) And Why (if yes)?
 - A. ___ An object moving in a circle.
 - B. ___ Going 20 m/s in a straight line.
 - C. ___ Slowing down.
 - D. ___ Constant speed around a corner.
 - E. ___ Equal distance each second and same direction.

Remember to get a calculator!!!!

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9. For Car 1 $a = 3 \text{ m/s}^2$. For Car 2, $a = 5 \text{ m/s}^2$
 - A. ___ Which one can achieve a faster speed?
 - B. ___ Which one goes farther sooner?
 - C. ___ Which one gets to 30 m/s last?
10. The following show the positions of three objects.
 - a. 
 - b. 
 - c. 
 - A. ___ Has constant speed? B. ___ Has negative acceleration?
 - C. ___ Which starts at rest? D. ___ Which has $V_i = V_f$?
11. What are V_i and V_f ?
12. Mathematically, what is ΔV ? (check your notes)
13. A car at rest ends accelerates for 12 seconds. After this time the car is going 36 m/s. What was its acceleration?
14. A car travels 12 m in 2 seconds. After 10 seconds of acceleration it travels 80 m in 4 seconds. Find its acceleration. (Use the example at the bottom of the notes to get this.)