Name: _____

Period:_____

HWUnit6:2 — Acceleration
Mr. Murray, IPC
cstephenmurray.com

Assigned: Mon., 1/8 and Tues., 1/9
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 = ΔD/ΔT, 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 = 3m/s^2. For Car 2, a = 5 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.)