A-day: Due Tues., Aug 31
B-day: Due Wed., Sept 1

2010-11 PreAP Linear Motion 3

1. How many sig figs are in the following measurements?
   A. 300,000,000 m/s
   B. 25.030° C
   C. 0.006 070° C
   D. 1.004 J
   E. 1.305 20 MHz

2. Give your answer with the correct number of significant figures.
   8.52 km + 10.463 m − 4056 cm =

3. Convert the following:
   A. 4,506,400 nm to km

   B. 120 mph to m/s

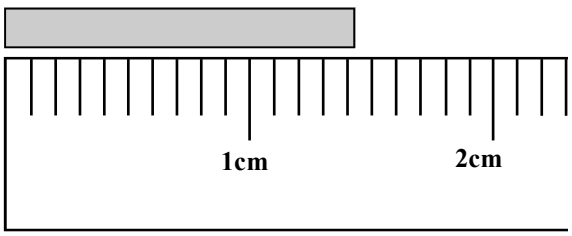
3.3 ft = 1 m	5280 ft = 1 mi
12 in = 1 ft	2.54 cm = 1 in.

I assume you know about seconds, mins, etc

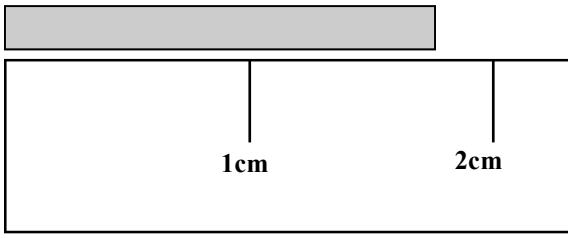
4. Which axis: vertical or horizontal?
   A. __ Is the dependent variable?
   B. __ Is the manipulated variable?
   C. ___Is the independent variable?
   D. ___Is the responsive variable?

5. Measure the following grey objects with the correct number of sig figs. Make sure you estimate between the gradations.

A. Object A:



B. Object B:



Math Practice:

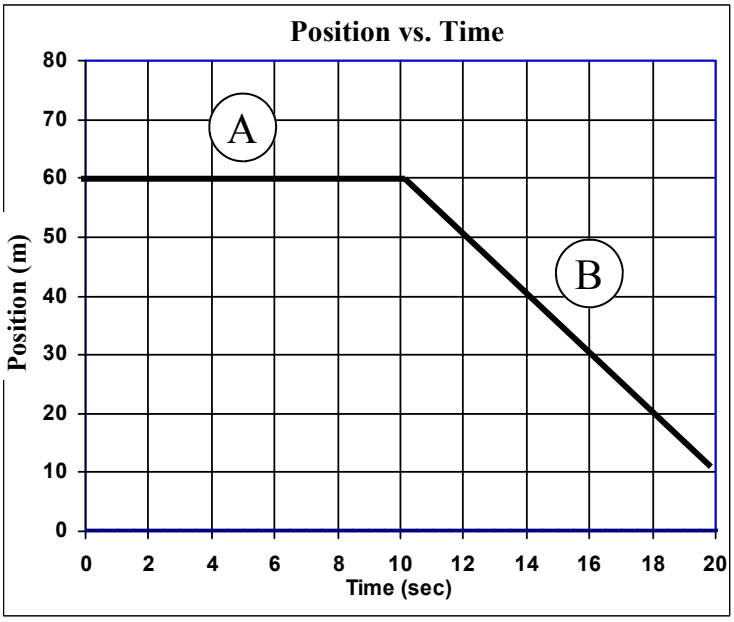
6. A. Simplify: $\dfrac{\left(\dfrac{y}{t}\right)}{\left(\dfrac{yt}{p}\right)} =$

7. Simplify: $\left((c^2)^{-4}\right)^{1/2} =$

8. $4x - 10y = 2$ and $3x + 5y = 14$. Solve for x and y.

9. A. Solve for x: $\dfrac{2}{x-2} = \dfrac{14}{2x+1}$

10. Solve for t: $P = \dfrac{W}{t}$

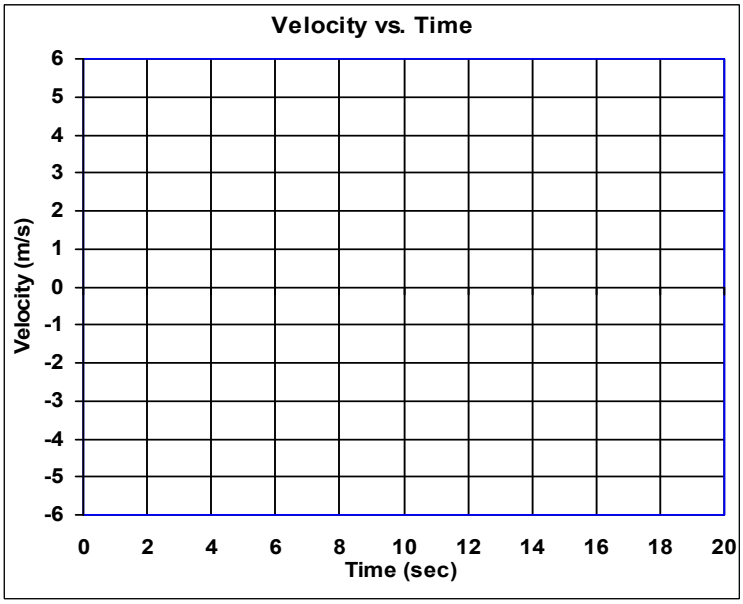


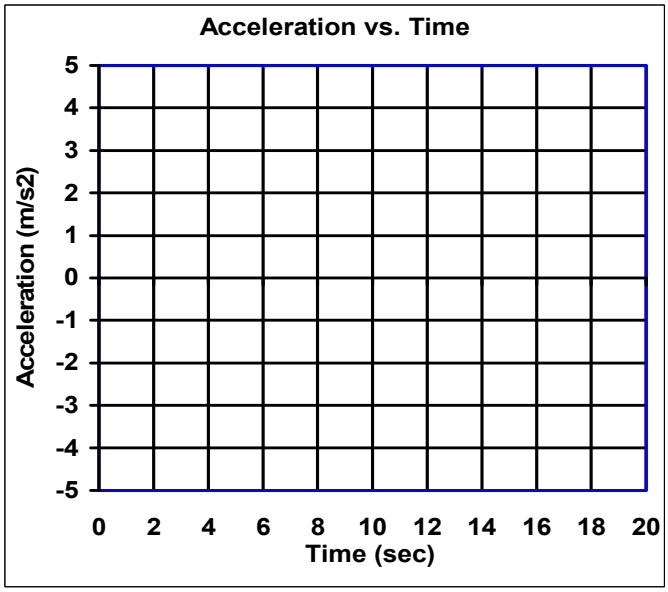
11. A. Find the slope of line segment A.

B. Find the slope of line segment B.

C. Graph both of these line segments on the velocity graph below.

D. Determine the acceleration of each line and graph on the acceleration graph below.





And do the: "How to Straighten Graphs" page. NOTE: this is a page that is self-teaching. Follow it closely and you will understand. Also, I have to do this every year because it is difficult to absorb.