

Physics Assignment for 10/22/2007

Term/Formula List for quiz:

translational motion	average velocity, $v_{av} =$
rectilinear motion	instantaneous velocity
curvilinear motion	scalar value
frame of reference	vector
speed	vector addition
velocity	resultant
constant velocity	simultaneous velocities
variable velocity	collinear velocities
distance	noncollinear velocities
displacement	

Homework Assignment:

- Day 1: Test 2 on chapters 4, 5
- Day 2: Read pgs 97 – 100; Questions 2, 4, 5, 7, 8; Problems 2, 3, 4, 5
- Day 3: Read pgs 101 - 107; Questions 9, 10; Problems 6, 7, 8
for problems 7,8 find the boat's velocity if it intersects the current at a 90°
- Day 4: TY pg 14 #5,6,7,16,17,18,19; Do At Home Lab #5;
Study for quiz.

Remember to print out Unit Conversion Sheet to turn in Monday.

Why did the chicken cross the road?

Isaac Newton: Chickens at rest tend to stay at rest, chickens in motion tend to cross roads.

At Home Lab:

Lab #5 Measuring Speed Lab

Record and graph a variable velocity. Collect at least **15** data points.

Graph your data, distance vs time.

Calculate the average speed of the event.

Graphically, find the instantaneous speed for 2 points on the graph.

Describe how changes in speed are seen in the graph.

For example:

Take a 15 minute car ride at variable speeds. Record distance traveled each minute.

Graph your data and complete the other steps for the lab. Record range and precision of timing device and odometer

Unit Conversion Practice Sheet – 10/22/07

Complete the following conversions. Reference back of text book for conversion factors. Please show work.

The second blank is for the quantity being measured.

1. $10.3 \text{ m} = \underline{\hspace{2cm}} \text{ km} \underline{\hspace{2cm}}$

2. $14.7 \text{ lbs/in}^2 = \underline{\hspace{2cm}} \text{ N/m}^2 \underline{\hspace{2cm}}$

3. $740 \text{ cm Hg} = \underline{\hspace{2cm}} \text{ atm} \underline{\hspace{2cm}}$

4. $.0031 \text{ kg} = \underline{\hspace{2cm}} \text{ g} \underline{\hspace{2cm}}$

5. $35.35 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ in}^3 \underline{\hspace{2cm}}$