Physics 112

Tuesday, December 12/17

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1. Check: Worksheet - Textbook - C6 PP #19-21
   Textbook - C6 PP #22-25 | E_k and $W = \Delta E_k$

2. FA - Kinetic and Work-Kinetic Energy Theorem

3. Check :
   Worksheet - Textbook - C6 PP #27 and 29
   - Textbook - C6 PP #30 and 33 | E_g and $W = \Delta E_g$

4. Restoring Force

5. Hooke's Law

6. Elastic Limit

7. Elastic Potential Energy

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8. Worksheet - Textbook - C6 PP #35-37
   Textbook - C6 PP #38-40 | Hooke's Law & E_e

9. Worksheet - C6 PFU Omit - #28

Formative Assessment

Kinetic Energy and Work-Kinetic Energy Theorem - Dec. 12

A 80.3 kg student wearing frictionless roller skates moving at 1.2 m/s on a horizontal surface is pushed by a friend with a constant force of 45 N.

a) How far must the student be pushed so that her final kinetic energy is 352 J?

b) What was the speed of the student after traveling the distance calculated in (a)?

Physics 122

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1. Check
   Worksheet - Coulomb's Law - Three Charges
   Textbook: Page 640 - #7 and 8

2. FA - Coulomb's Law: Three Charges

3. Worksheet - Textbook: C14 Page 646, #11-14
   Textbook: Page 655, #20-24

electric field strength

4. Review - Gravitational Potential Energy

5. Electric Potential Energy

6. Formula: Electric Potential Energy

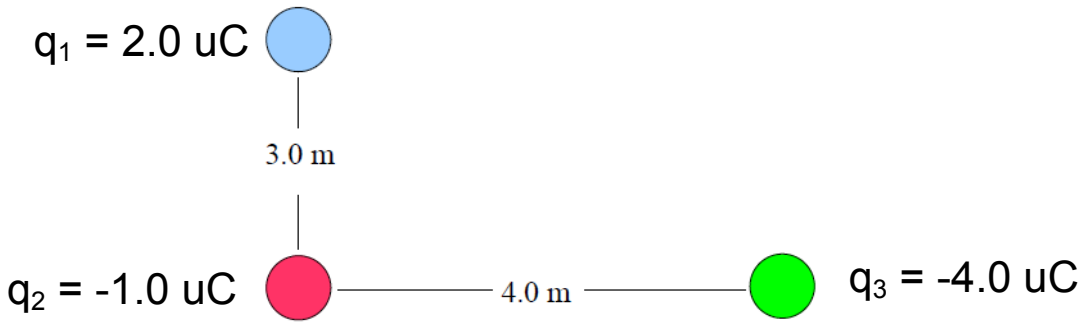
7. Electric Potential Difference

8. SA - U3 S1: Electrostatics

Formative Assessment

Coulomb's Law - Dec. 12

Three charges are arranged as shown below. Find the net electric charge on q_3.



Science 10

Tuesday, December 12/17

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1. Optional Assignment - Graphing Characters (max 2 -20 pts each)
   - Submit before Christmas break.

2. Questions?
   Worksheet - Questions About Distance-Time Graphs

3. Problem Solving Template - Continue

4. Sample Problems: Average Speed Problem

5. Worksheet - Speed, Distance and Time
   Worksheet - Understanding Concepts - Page 358: #3-9

6. Topics: SA - Physics #2

7. SA - Physics #2 - Next Tuesday or Wednesday

Topics - SA: Physics #2

1. Plot and label points in the four quadrants.

2. Write the coordinates of a plotted point.

3. Determine the slope of a line using:

$$m = \frac{\text{rise}}{\text{run}} \quad \text{OR} \quad m = \frac{y_2 - y_1}{x_2 - x_1}$$

4. Draw and label a distance vs. time graph.

5. Be able to determine the speed of an object from a distance vs. time graph.

6. Match a graph to a story/interpret a graph.

7. Identify the type of motion of an object (uniform motion or uniformly accelerated motion).

8. Answer questions about distance vs. time graphs.

9. Solve average speed problems. (3) ~~x~~ not on review