March 31 Gradekeeper Type Report

April 1 AM PT No School.

April 13 (Wed.) Report Cards

April 14 (Thur.) Evening PT

Physics 112

Tuesday, March 1/16

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Explain That Stuff - March 4/16

1. Meetings -> Quiz - Basic Skills
2. FA - Determine $\vec{R}$ Analytically
2. Time, Speed, Velocity, Acceleration
3. Directions of Velocity and Acceleration - To Be Continued
4. Types of Motion: Uniform and Uniformly Accelerated Motion
5. Assignment: U1-S1 -> March 4/16

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6. Unit 1 - Section 2: Graphical Analysis
7. Position-Time Graphs

Formative Assessment - Find **R** Analytically

Tuesday - March 1/16

Two acceleration vectors are 22.6 m [W] and 37.0 m [N]. Find their resultant analytically. (math) ✍

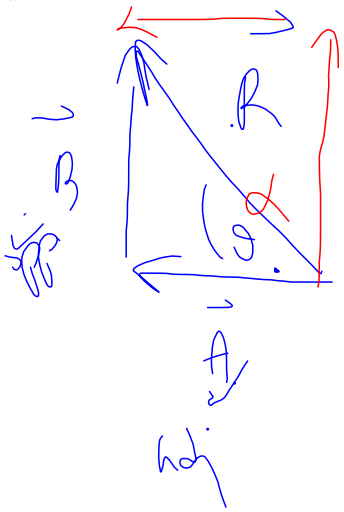
$\vec{A} = 22.6\text{ m [W]}$

$\vec{B} = 37.0\text{ m [N]}$

$\vec{R}$ = 43.4 m, 58.6° N of W
31.4° W of N

90.0 − 58.6°

Sketch



magnitude of R.

$R^2 = A^2 + B^2$

$R = \sqrt{A^2 + B^2}$

$R = \sqrt{(22.6\text{ m})^2 + (37.0\text{ m})^2}$

$R = 43.4\text{ m}$

magnitude of θ

$\tan\theta = \frac{37.0}{22.6}$ → 3rd → 3rd

$\theta = 58.6°$

$\vec{R} = 43.4\text{ m}, 58.6°\text{ N of W}$

[W 58.6° N]

Topics: Assignment U1-S1

1. kinematics
2. two types of physical quantities:
   (i) scalar quantity - has magnitude only
   - has units
   - be able to name and give examples of four scalar quantities
   (ii) vector quantity - has magnitude and direction
   - has units
   - vector notation
   - conventional directions
   - be able to name and give examples of four vector quantities
3. arrows are used to represent vector quantities graphically
4. resultant
5. two methods used to add vector quantities:
   (i) tip-to-tail method
   (ii) parallelogram method
6. use rubric to determine a resultant graphically
7. use rubric to determine a resultant analytically
8. be able to determine the range of possible resultant values given the magnitudes of two vectors and/or the angles between them
9. a) two types of frames of reference:
   (i) stationary/fixed
   (ii) moving
   b) determine whether one object is moving relative to another
10. motion vocabulary and definitions
11. use signs of velocity and acceleration to describe an object's motion, etc (ie/ van scanario)
12. two types of motion
   (i) uniform
   (ii) uniformly accelerated motion

Format: Multiple Choice (MC)
Short Answer
Chart (ie/ van)
Find $\vec{R}$ graphically or analytically

Science 122
Tuesday, March 1/16

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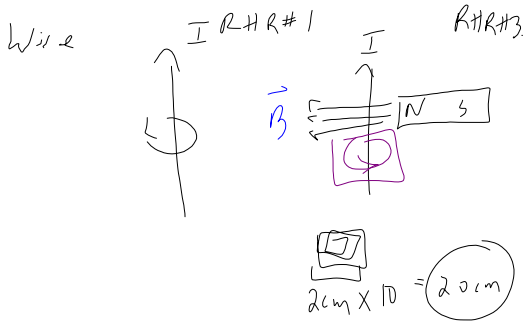
1. Quiz - Start to Electric Motors

$F = ILB\sin\theta$

2. Worksheet: The Force On A Wire In a Magnetic Field
   Worksheet: Magnetic Force on a Single Charged Particle
3. Trajectory of A Single Charged Particle in a Uniform Magnetic Field
4. Worksheet: Magnetic Fields and Circular Paths



3 HR modified.

$F = qvB\sin\theta$

q: e^-, p^+ 1.60×10^{-19} C

$F = ma$

$F = mg$

#6. electrons
$q = 1.60 \times 10^{-19}$ C] charged particle

$E_K = K = 2.40 \times 10^{-15}$ J

$B = 2.00 \times 10^{-5}$ T

$a = ?$

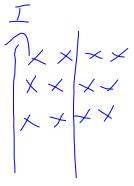
$F = qvB\sin\theta$

$ma = qvB\sin\theta$

m_e q_e

$E_K = \frac{1}{2}mv^2$

$v = \sqrt{\frac{2E_K}{m}}$



Science 10

Tuesday, March 1/16

http://mvhs.nbed.nb.ca/

1. Return -> Assignment - Mixed Compounds

2. Second Attempt - Thursday at Noon
   - Must Get Extra Help Tuesday or Wednesday

3. Check -> Worksheet - Balancing Chemical Reactions #1

4. Worksheet - Balancing Chemical Reactions #2

5. Types of Chemical Reactions

6. Synthesis/Formation Reactions - To Be Continued

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7. Decomposition Reactions

8. Worksheet: Formation and Decomposition Reactions

9. Single Replacement Reactions

10. Double Replacement Reactions

11. Worksheet: Single and Double Replacments Reactions

Physics 122

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Explain That Stuff - March 4/16

1. Center of Mass - Fosbury Flop
2. Types of Motion
3. Torque
4. Net Torque
5. Static Equilibrium Revisited
6. Static Torque Problems - To Be Continued