Tuesday, February 10/15
Science 122

http://mvhs-sherrard.weebly.com/

Grad meeting to Wednesday during IS - Main Theatre.

1. Check -> RHR - Sheet

2. Symbols: Current Into and Out of Page/Board

3. Two Wires

4. Electric Motor - Notes
   - Model -> TBC

5. Quiz -> Start to End of Electric Motors
   -> ~~Thursday. Feb. 2/13.~~

6. Magnitude of Magnetic Fields

7. Worksheet - Magnetic Field Produced by a Wire

Tuesday, February 10/15
Physics 122/121

http://mvhs-sherrard.weebly.com/

Grad meeting to Wednesday during IS - Main Theatre

1. Check -> Worksheets - Type II Force Problems

2. Type III Force Problems - Incline Plane Problems - TBC

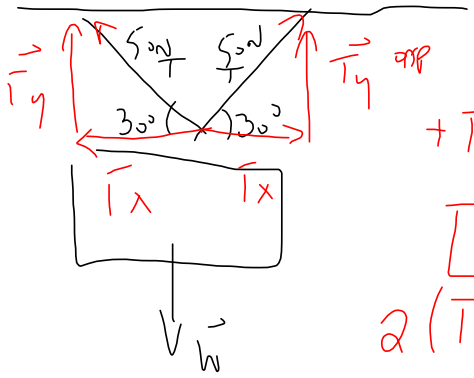
3. Text: Chapter 5 -> Page 191, #25
   Page 194, #27, 28

4. Worksheet - Sample Problems: Inclined Planes

5. Quiz - Force Problems: Types I, II and III
   -> Monday/Tuesday Next Week

Type II - Simple.

1.



$\vec{F}_{net_y} = m\vec{a}_y$

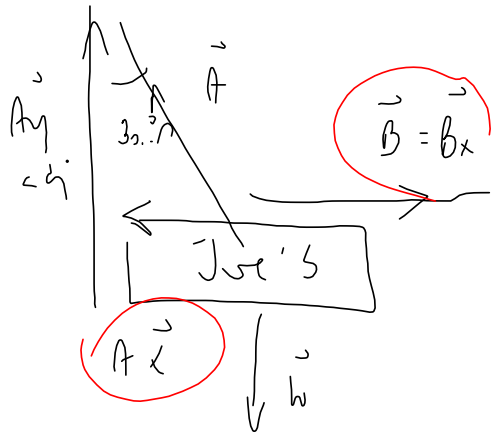
$+\vec{T}_y + \vec{T}_y - W = 0$

$2\vec{T}_y - W = 0$

$2(\vec{T}\sin\theta) - W = 0$

$2\vec{T}\sin\theta = W$

Short Sheet- Complex.



$W = 750N$

$+A_y - W = 0$

$A\cos 30.0^\circ - W = 0$

$A = \frac{W}{\cos 30.0^\circ}$

$A = \frac{750}{\cos 30.0^\circ}$

$A = 866.0\ N$

$+B_x - A_x = 0$

$B - A\sin 30.0^\circ = 0$

$B = A\sin 30.0^\circ$

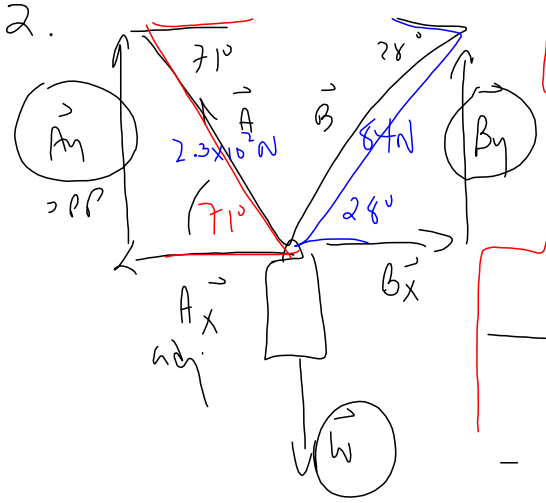
$B = 866.0\sin 30.0^\circ$

$B = 433N$

magnitude → size.

The magnitude in B is 433N.

2.



$m = 26\,kg$

$+A_y + B_y - W = 0$ (3)

$A\sin 71^\circ + B\sin 28^\circ - mg = 0$ (1) (1) (1)

$-A_x + B_x = 0$ (2)

$-A\cos 71^\circ + B\cos 28^\circ = 0$ (1) (1)

$B = \dfrac{A\cos 71^\circ}{\cos 28^\circ}$ (1)

$\begin{bmatrix} 84\,N \\ 84\,N \end{bmatrix} =$ (1)

$\tan 28^\circ = \dfrac{\sin 28^\circ}{\cos 28^\circ}$

$A\sin 71^\circ + \dfrac{A\cos 71^\circ \sin 28^\circ}{\cos 28^\circ} - mg = 0$ (1)

$A\sin 71^\circ + A\cos 71^\circ \tan 28^\circ - mg = 0$

$A\sin 71^\circ + A\cos 71^\circ \tan 28^\circ = mg$

$A(\sin 71^\circ + \cos 71^\circ \tan 28^\circ) = mg$

$A = \dfrac{mg}{[\sin 71^\circ + \cos 71^\circ \tan 28^\circ]}$ (1)

$A = \dfrac{(26)(9.80)}{\sin 71^\circ + \cos 71^\circ \tan 28^\circ}$

$A = 2.3 \times 10^2\,N$ (1)

Tuesday, February 10/15
Science 10

On Feb 24, St. John Ambulance is putting on a First-Aid and CPR course for students. It is free, and students do get certified. Focus -> Grade 10 students.

1. Article Review - Indicators - 4 Days Late Today
2. Assignment - Indicator Species - 2 Days Late Today
3. Assignment - Oh, What a Tangled Web...
   - Pass in Today for Marking
4. Quiz - Ecology to Food Webs -> Thursday
5. Textbook: Page 13 - Understanding Concepts #1, 2, 4 a-b
   Page 23 – Understanding Concepts, #1, 2, 3, 4, 5
6. Biodiversity -> Video Tomorrow

HW

7. Bioaccumulation