Thursday, September 12/13
Physics 122/121

1. HW - Formative -> Return
2. Check -> Worksheet: Type II - Suspended Objects
3. Type II Problems - More Complex
4. Worksheet: Type II Force Problems (More Complex) - HW

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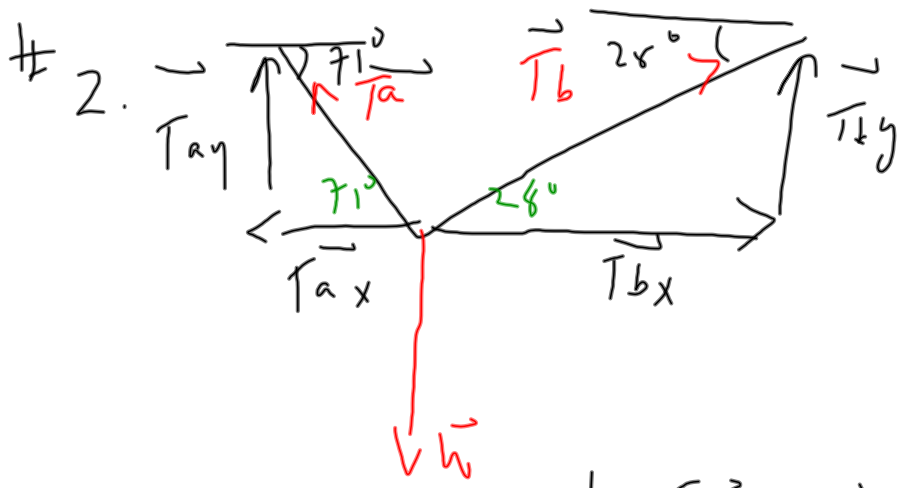
5. Type III Problems - Inclined Planes, Hills and Ramps
6. Worksheet: Sample Problems - Inclined Planes

2.



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

$+T_{ay} + T_{by} - w = 0$

$T_a \sin 71° + T_b \sin 28° - mg = 0$

$\vec{F}_{net_x} = m\vec{a}$

$-T_{ax} + T_{bx} = 0$

$-T_a \cos 71° + T_b \cos 28° = 0$

$T_b \cos 28° = T_a \cos 71°$

system of equations

$T_a = \dfrac{T_b \cos 28°}{\cos 71°}$

$\dfrac{T_b \cos 28° \cdot \sin 71°}{\cos 71°} + T_b \sin 28° - mg = 0$

$T_b \cos 28° \tan 71° + T_b \sin 28° - mg = 0$

$T_b(\cos 28° \tan 71° + \sin 28°) = mg$

$T_b = \dfrac{mg}{\cos 28° \tan 71° + \sin 28°}$

$T_b =$ _____

Attachments

Course Outline - Physics 112 1 (2013).doc

Course Outline - Science 10 NS (2013).doc

Course Outline - Physics 122 1 (2013).doc

Course Outline - Intro to Env Sci 120 (2013).doc