Homework 2 Example

• Calculate the tension in the left string.

x-direction: ΣF=ma

 $-T_{\rm L} + T_{\rm R} \cos(\theta) = 0$

 $T_L = T_R \cos(\theta)$

y-direction: ΣF=ma

 $T_R \sin(\theta) - Mg = 0$

 $T_R = Mg / sin(\theta)$

м

Combine:

 $T_L = Mg \cos(\theta) / \sin(\theta)$

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