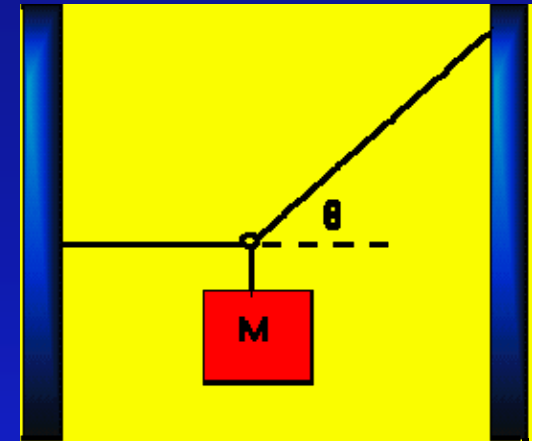
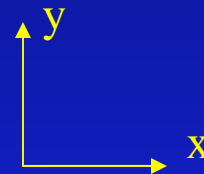


Homework 2 Example

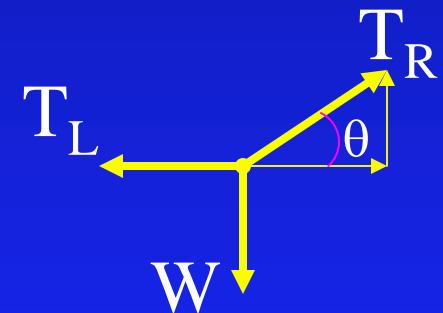
- Calculate the tension in the left string.



x-direction: $\Sigma F=ma$

$$-T_L + T_R \cos(\theta) = 0$$

$$T_L = T_R \cos(\theta)$$



y-direction: $\Sigma F=ma$

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

$$T_R = Mg / \sin(\theta)$$

Combine:

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