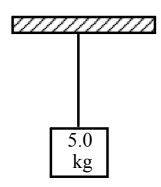
## Applications of Newton's Laws

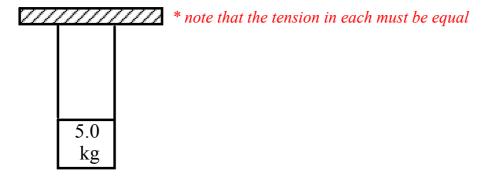
## **Hanging Picture Problems**

When Fnet = 0 the problems are sometimes called "statics" problems

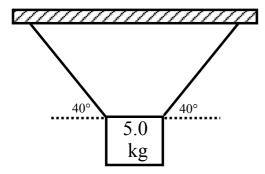
Ex 1: Find the tension, T, in the string. \* note that there is no normal force



Ex 2: Find the tension, *T*, in each string.



Ex 3: Find the tension, *T*, in each string.



T = 38 N

As the angle  $\boldsymbol{\theta}$  goes to zero, (the strings go almost horizontal) the Tension increases dramatically.

Ex 4: Find the tension, *T*, in each string. Note that each will be different.

