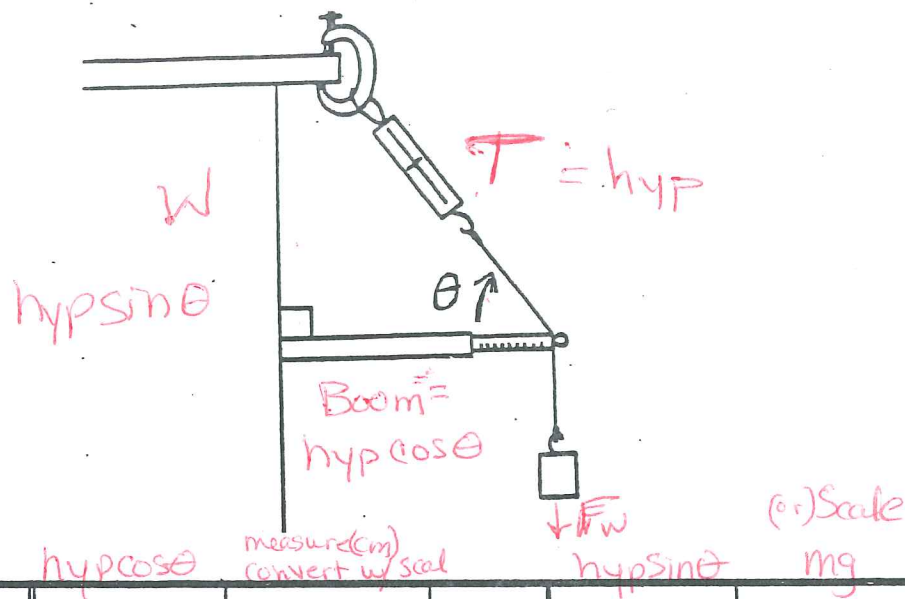


Purpose:

Name _____

Procedure: RESOLUTION OF A FORCE



TRIAL	CABLE TENSION (N)	ANGLE θ	CALCULATED BOOM TENSION (N)	MEASURED BOOM TENSION (N)	% ERROR	CALCULATED WEIGHT (N)	MEASURED WEIGHT (N)	% ERROR
1								
2								
3								

Sample calculations:

$$\text{ERROR} = \frac{\text{MEASURED} - \text{CALCULATED}}{\text{MEASURED}} \times 100\%$$

QUESTIONS:

1. FOR WHAT ANGLE WOULD THE CABLE TENSION BE EQUAL TO THE LOAD?
2. IF THE ANGLE θ IS MADE SMALLER (FOR A FIXED LOAD), WHAT WOULD HAPPEN TO THE CABLE TENSION?

CONCLUSION: DISCUSS RESULTS (ERRORS), MAKE 2 OBSERVATIONS ABOUT DATA AND/OR USEFULNESS OF LAB