Name:_____   Date of Lab:____ ____ _____

Partner:_____

Lab 1: Waves on a String

Parts 1 & 2: Basic Measurements for n = 3, m = 100 g	
Quantity	*Value*
String Length L (cm)	$\pm$
Frequency f_3 (Hz)	$\pm$
Wavelength λ (cm)	$\pm$
Parts 3 & 4: Varying Frequency	
Slope (units:)	$\pm$
Intercept (units:)	$\pm$
Wave Speed (m/s)	$\pm$
Parts 5 & 6: Varying Tension	
Slope (units:)	$\pm$
Intercept (units:)	$\pm$
String Linear Density μ (g/m)	$\pm$
Measurement Using Sample String	
String Length L (cm)	$\pm$
String mass m (g)	$\pm$
String Linear Density μ (g/m)	$\pm$

You now have two measurements of μ, neither of which is perfect. What do *you* think μ really is?

Justify your answer; also, be quantitative, and include an uncertainty.