Name: $\qquad$ Lab Date: $\qquad$
Partner: $\qquad$
Lab 2: Interference and Diffraction of Light

| Part I: Single Slit |  |
| :---: | :---: |
| Quantity | Value |
| $D$ (m) | $\pm$ |
| $a$ (mm) | $\pm$ |
| Slope of $y$ vs $m$ graph ( $\mu \mathrm{m}$ ) | $\pm$ |
| Computed $\lambda$ from slope (nm) | $\pm$ |
| Part II: Double Slit |  |
| $D$ (m) | $\pm$ |
| $d$ (mm) | $\pm$ |
| Slope of $y$ vs $n$ graph ( $\mu \mathrm{m}$ ) | $\pm$ |
| Computed $\lambda$ from slope (nm) | $\pm$ |
| You now have two measurements of $\lambda$, neither of which is perfect. Based on these, what do you think $\lambda$ really is? Justify your answer; also, be quantitative, and include an uncertainty. |  |

