

name _____

ID# _____

Experiment 11

Diffraction of Light

$\lambda \sim 6.4 \times 10^{-7} \text{ m}$

L _____

Single slit

y measurements = _____

number of bright spots = _____

average value for y = _____

b = _____

% error = _____

show equations and calculations:

The Double Slit

y measurements = _____

number of bright spots = _____

average value for y = _____

d = _____

% error = _____

show equations and calculations:

The Diffraction Grating

L _____

Distance to first maximum on the left _____

Distance to first maximum on the right _____

Average _____

Calculated slit separation =

Show equations and calculations:

Slit density = _____

Slit separation = _____

% error = _____

(9 points)

