

Name _____

PHYS319 Optics
Pre-lab Diffraction 1

1. What is diffraction?
2. What is Huygens-Fresnel Principle?
3. What is Fraunhofer Diffraction? What is Fresnel Diffraction?
4. What the “sinc” function? How is the plot of $(\text{sinc})^2$ vs. β fundamentally different from sinc vs. β .
5. In figure 10.10 of Hecht, a note concerning the diffraction pattern states the “This is the irradiance (and not the electric field) distribution. What is the definition of irradiance and what are its units?”