

Name \_\_\_\_\_

**PHYS319 Optics**  
**Pre-lab Polarization 2- Fresnel Equations**

1. What are the Fresnel Equations (i.e., what phenomena do they describe)?

2. What are the two common pronunciations (English and French) of Fresnel. Include some type of pronunciation guide (i.e., phonetic spelling(s)).

3. See 2<sup>nd</sup> page of procedure to answer the following.

“Remember that intensity is proportional to the \_\_\_\_\_ of the electric vector and that the Fresnel equations give \_\_\_\_\_ of the reflected electric vector to the electric vector.”

4. **Since you measure intensity** (see answer above- first blank) **qualitatively sketch** what the plots of r-parallel and r-perpendicular look like based upon the plots of amplitude coefficients vs. angle given in the procedure. Do not make it complicated.

5. The reflection coefficients are called r-parallel and r-perpendicular. They are parallel and perpendicular to what?