**Physics 200 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**(Stapleton)**

**Rules for Ray Tracing with Lenses**

* Rays parallel to the principal axis refract through the focus (f).
* Rays through the focus (f) refract parallel to the principal axis.
* Rays through the center of the lens travel straight through and do not refract.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

1.

**f**

**f**

**2f**

**2f**

**3f**

**3f**

**f**

**f**

**2f**

**2f**

**3f**

**3f**

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

2.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

**f**

**f**

**2f**

**2f**

**3f**

**3f**

3.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

**f**

**f**

**2f**

**2f**

**3f**

**3f**

4.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

**f**

**f**

**2f**

**2f**

**3f**

**3f**

5.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

**f**

**f**

**2f**

**2f**

**3f**

**3f**

6.

do = \_\_\_\_\_ di = \_\_\_\_\_

ho = \_\_\_\_\_ hi = \_\_\_\_\_

**f**

**f**

**2f**

**2f**

**3f**

**3f**

7.