

Name: \_\_\_\_\_

1. State the law of reflection. Write the equation. (10 pts)
2. State the law of refraction. Write the equation. (10 pts)
3. What is the definition of a virtual image? (10 pts)
4. What is total internal reflection? (10 pts)
5. Define *critical angle*. (10 pts)
6. Define *parallax*. (10 pts)
7. Write Snell's Law. Using Eq. 21.4, derive the equation for the critical angle:  $\theta_C = \underline{\hspace{2cm}}$ . (40 pts)