Name:

Student ID:

Homework 5

1. How does light bounce off of a lambertian surface? Write an equation that computes the illuminance of a point on a lambertian surface, given the normal of the surface, $\vec{N}$, the viewing direction $\vec{V}$, and the direction of the light, $\vec{L}$. You may add other parameters to the equation as you see fit.

2. How does light bounce off of a perfectly specular surface? Write an equation that computes the illuminance of a point on a perfectly specular surface, given the normal of the surface, $\vec{N}$, the viewing direction $\vec{V}$, and the direction of the light, $\vec{L}$. You may add other parameters to the equation as you see fit.

3. Discuss the differences you might expect to see in the appearance of specular reflections modeled with $(N \cdot H)^{n_s}$ compared to the specular reflections modeled with $(V \cdot R)^{n_s}$.