Homework 6: Ray Tracing

Due: Tuesday, Apr 7 (9:30 AM)

1 Illuminating Samples

Question 1 When computing the illumination during ray tracing, what is the purpose of the ambient term in our lighting equation? What real-world effect does it approximate that ray tracing doesn't capture?

Question 2 What type of surfaces does specular lighting approximate? What is the purpose of the Phong exponent in our lighting model?

Question 3 How do you determine whether a particular light source affects an object (the object is not in shadow)? In what **other** case should the contribution of the light source to the object's color be 0?