

Lecture 8: Shading – Review Questions

- Describe the differences between the ambient, diffuse, and specular lighting models.
- What information do you need to compute the color at a point due to ambient reflection? Write an expression that performs this color computation.
- What information do you need to compute the color at a point due to diffuse reflection? What expression performs this color computation for a directional light source? for a point light source?
- What information is needed to determine color due to specular reflection? Write the expression for this color computation for directional and point light sources.
- Explain Gouraud shading.
- How do we get normals for Gouraud shading? At what points are the normals calculated?
- Explain Phong shading.
- How do we get normals for Phong shading? At what points are these normals calculated?
- How does Phong shading differ from Gouraud shading? Which is more computationally intensive, and why? Give some examples where you would expect to be able to visually identify the differences.