Problem 1 – Phong Lighting Model [50%]

If we have a point on a model surface at world coordinates (10,5,0) where the surface normal is (0,1,0), and we have a camera at world coordinates (5,8,0) facing that point, where would a point light source have to be, according to the Phong Lighting Model, for us to see:

   a. The maximum diffuse light intensity in the point
   b. The maximum specular light intensity in the point
   c. The maximum ambient light intensity in the point

Problem 2 – Texture Use [50%]

Name and explain 8 different kinds of information that one could store and look up in a texture, using interpolated texture coordinates, during the rendering of a particular pixel.