

CS 381 Computer Graphics, Fall 2012
Quiz 6 Solutions

Quiz 6 was given in class on Tuesday, November 13, 2012.

1. [3 pts] What is “reflection mapping”? Be specific.

Reflection mapping is simulating reflections by using the reflected viewing vector to do texture look-up.

2. [2 pts] Environment-map-based reflection mapping can produce inaccurate results (even when it is “done right”). Explain one such inaccuracy.

Here are a three inaccuracies:

- This technique is not good at handling reflections from an object to itself (e.g., a reflection of the teapot handle seen in the teapot body).
- The environment map will be drawn from the point of view of a particular location. Using it to draw reflections seen at even slightly different locations, will be just a bit inaccurate.
- The technique assumes the rest of the scene is an infinite distance away. Of course, this is not true, resulting in somewhat inaccurate reflections.