

CSCI-4962: Three-Dimensional Computer Graphics
Class 3: September 5, 2002
Scan Conversion, Geometric Transformations

Today's Class

1. Scan conversion of lines, Bresenham algorithm
2. Scan conversion of polygons and filled shapes
3. Geometric transformations in 2D: translation, rotation, scaling
4. Homogeneous coordinates
5. Composition of transformations

Reading

Chapter 8.9–8.11.2 and Chapter 4–4.8.3 of the Angel textbook.
Chapter 3 of the OpenGL red book.

Activity

Try Nate Robins' *Transformation* tutorial (on CD in Angel textbook). Do you get the same image if you swap the rotation and translation operations?

Next Class

3D Geometric transformations.