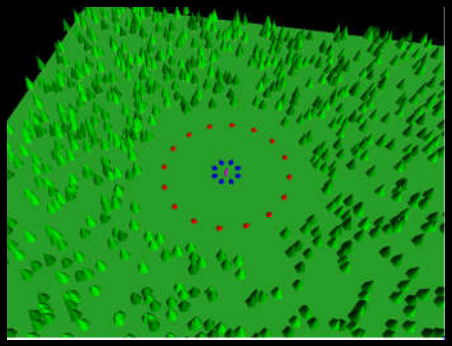
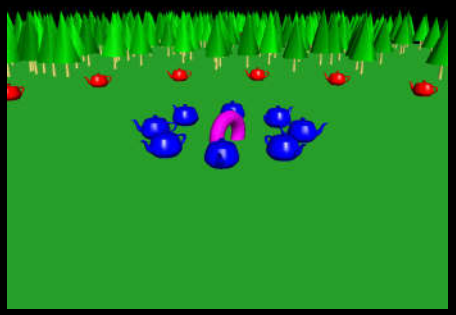
LEI / LCC
Departamento de Informática
Universidade do Minho

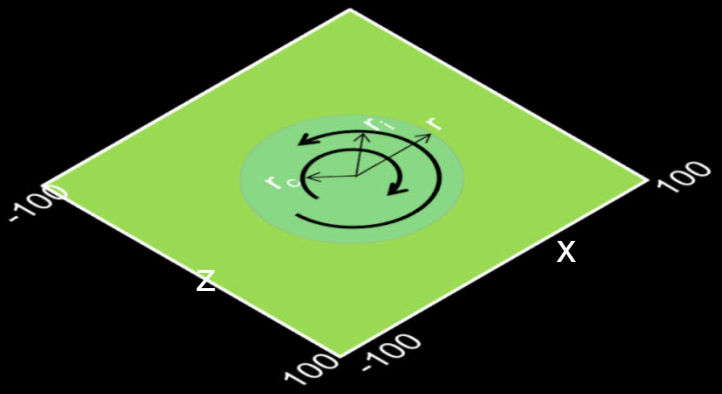
Geometric Transformations

Building a 3D World

West World







$r = 50$
$ri = 35$
$rc = 15$

Required functions

```
(stdlib.h)
void srand(int seed); // start the random number sequence
int rand(void); // returns a number between 0 and RAND_MAX

void glTranslatef(float x, float y, float z);
void glRotatef(float ang, float x, float y, float z); // ang in degrees

void glPushMatrix(void);
void glPopMatrix(void);

void glutSolidCone(float baseRadius,float height, int slices,int stacks);
void glutSolidTorus(float innerRadius, float outterRadius, int sides, int rings);
void glutSolidTeapot(float dimensao);

glBegin(GL_TRIANGLES);
     glVertex3f(…);
     ...
glEnd();
```