Cylinder Normals

- Making normals "flat" across the top of a cylinder

Planar Reflections

u magnifies xz of reflectview based on normal.y intensity

without •u, normal.y has no effect on sampling, so reflection looks flat.

Cubemap Reflections

textureCube(u_Skybox, ___)

vec3

(0,1,0) will sample middle pixel of top face.

- so use v_Normal = normalize(a_Position.xyz);

now use textureCube(u_Skybox, v_Normal)

Normals for Land

cross product

cross(b, a) = vec3 of length ~~|a|·|b|·sinθ~~

will be length 1 if a & b are normalized