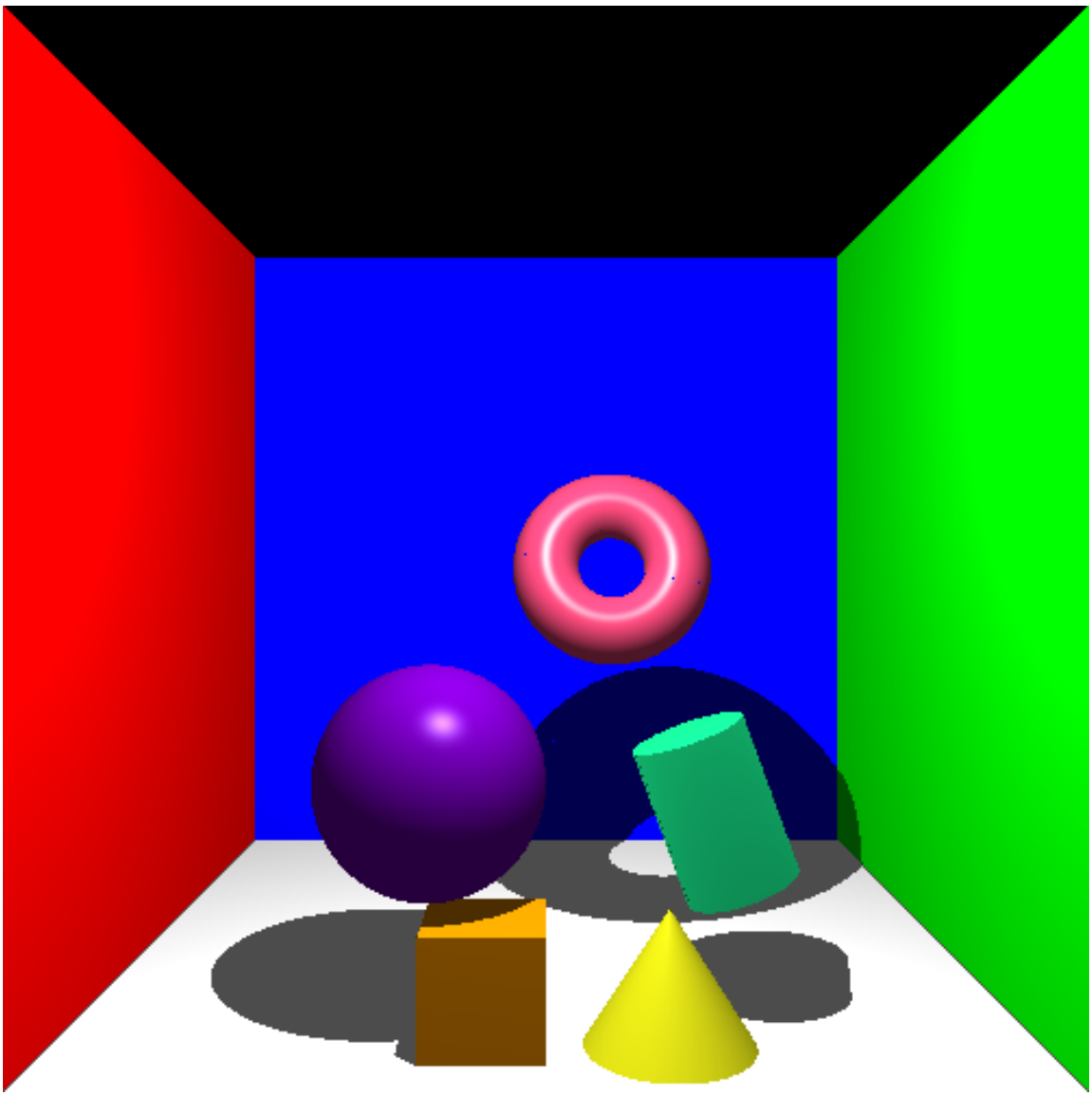
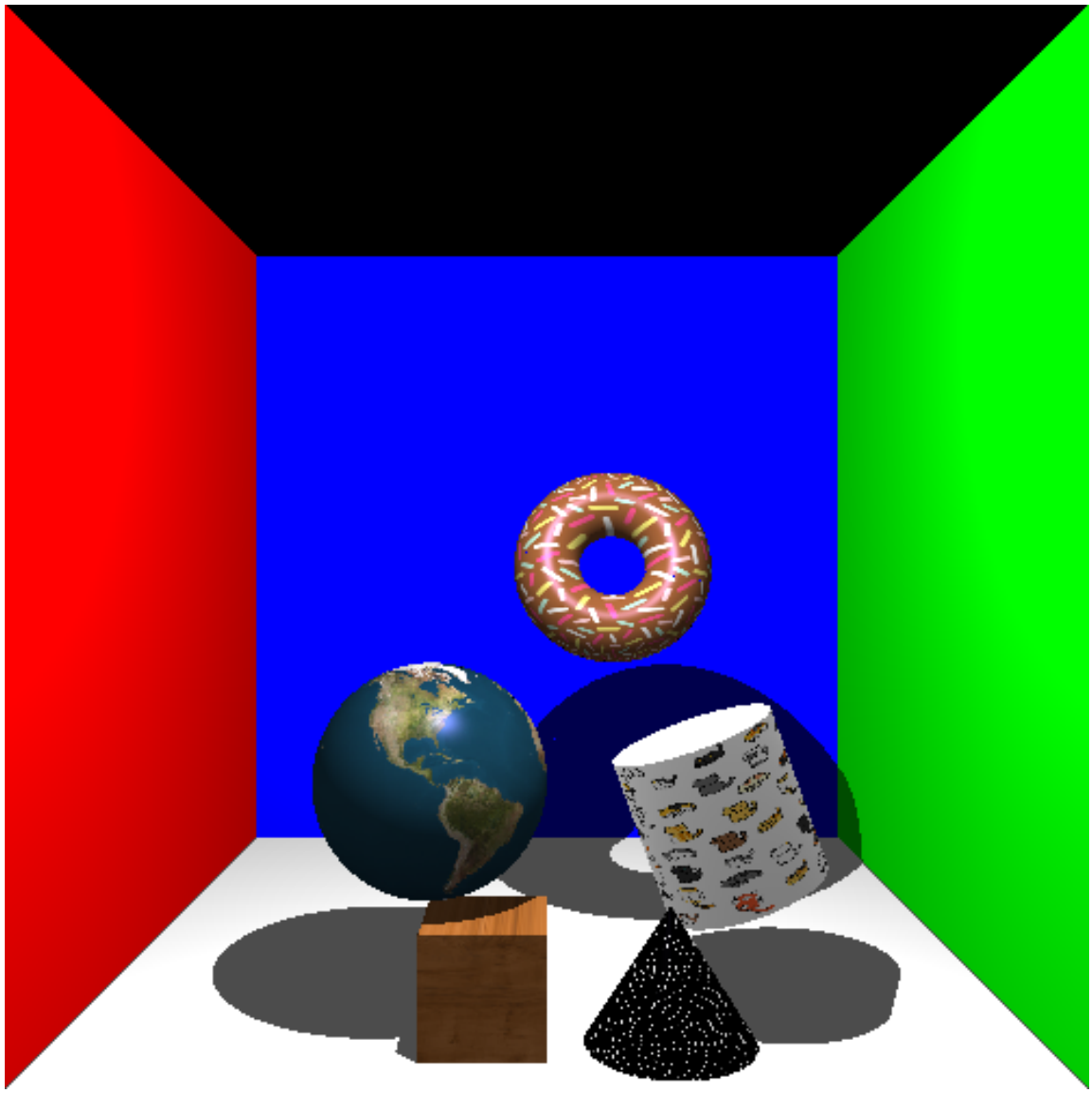
CS488 F17
PROJECT DEMO

BY YIDUO JING

OBJECTIVE I: CYLINDER & CONE PRIMITIVES



OBJECTIVE II TEXTURE MAPPING



OBJECTIVE III SUPERSAMPLING

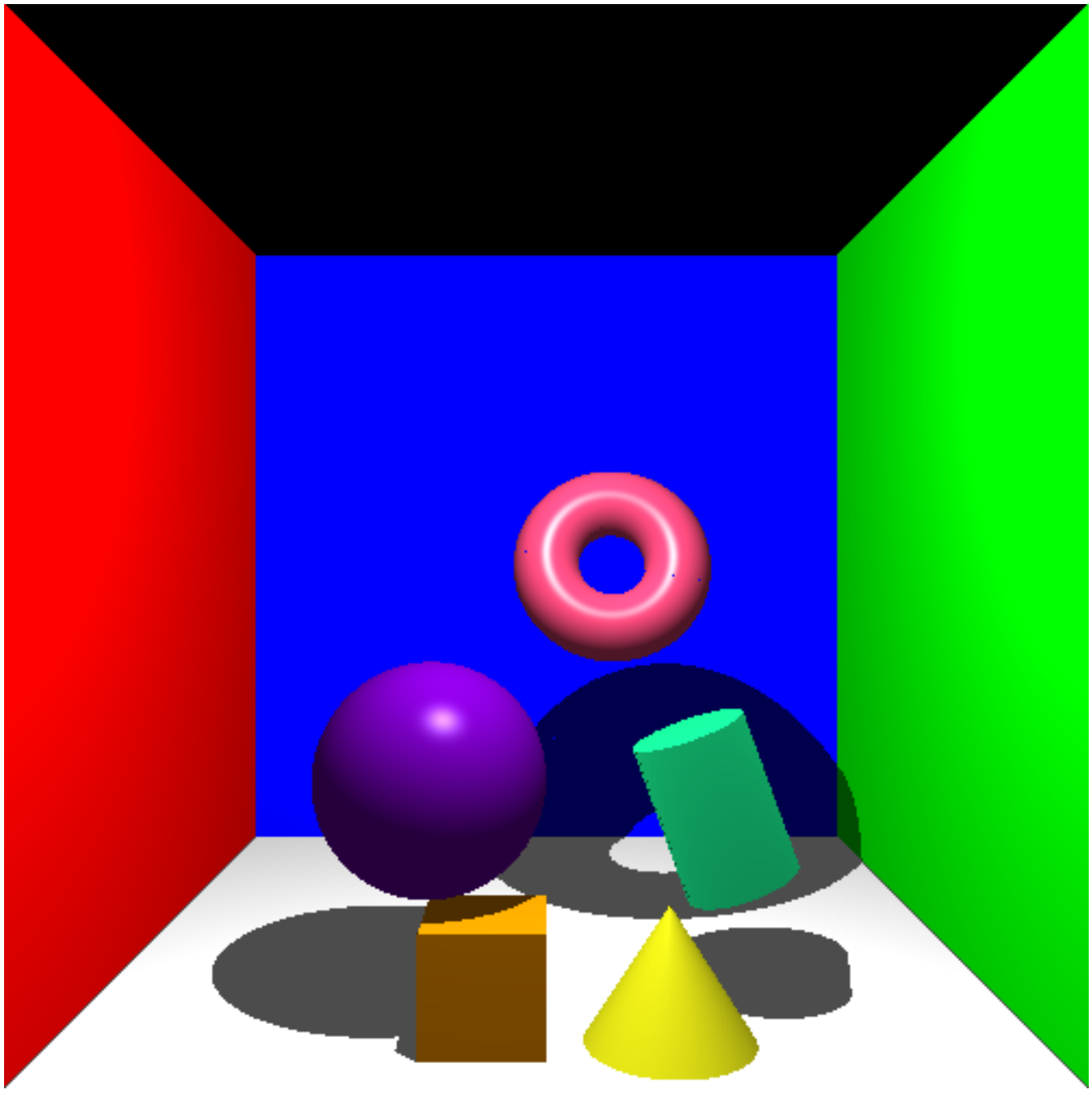


Figure without supersampling (jaggies)

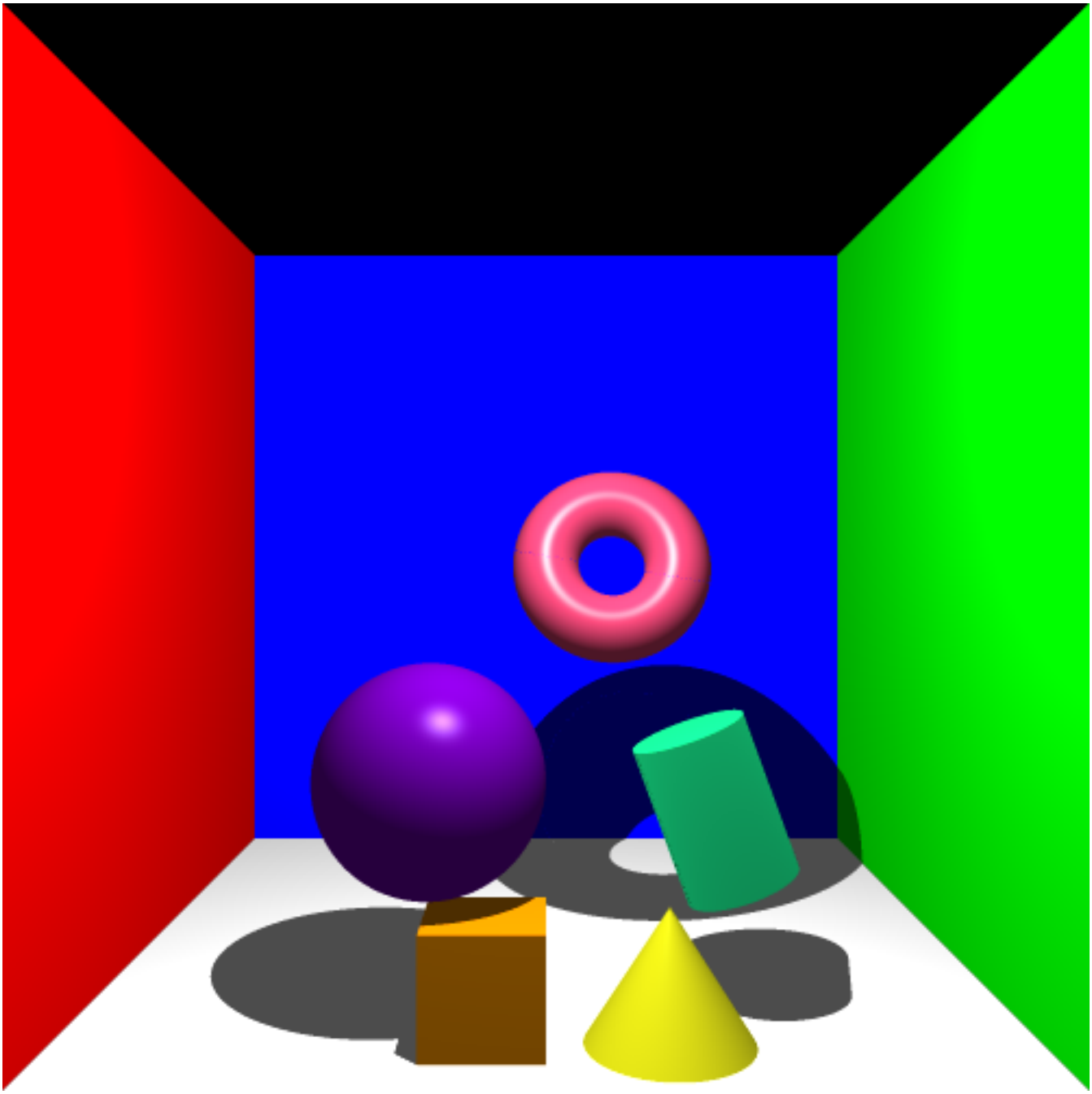
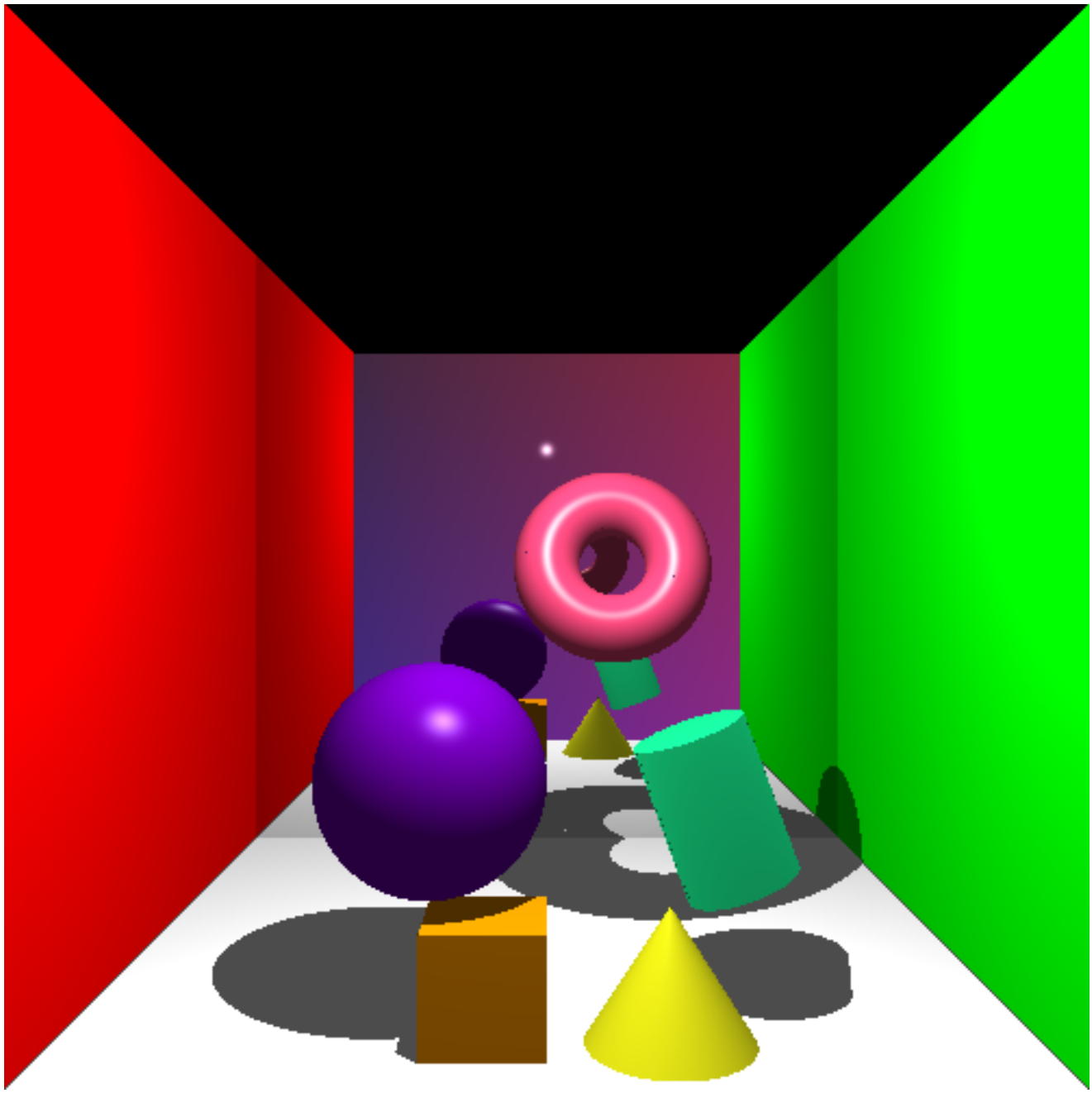
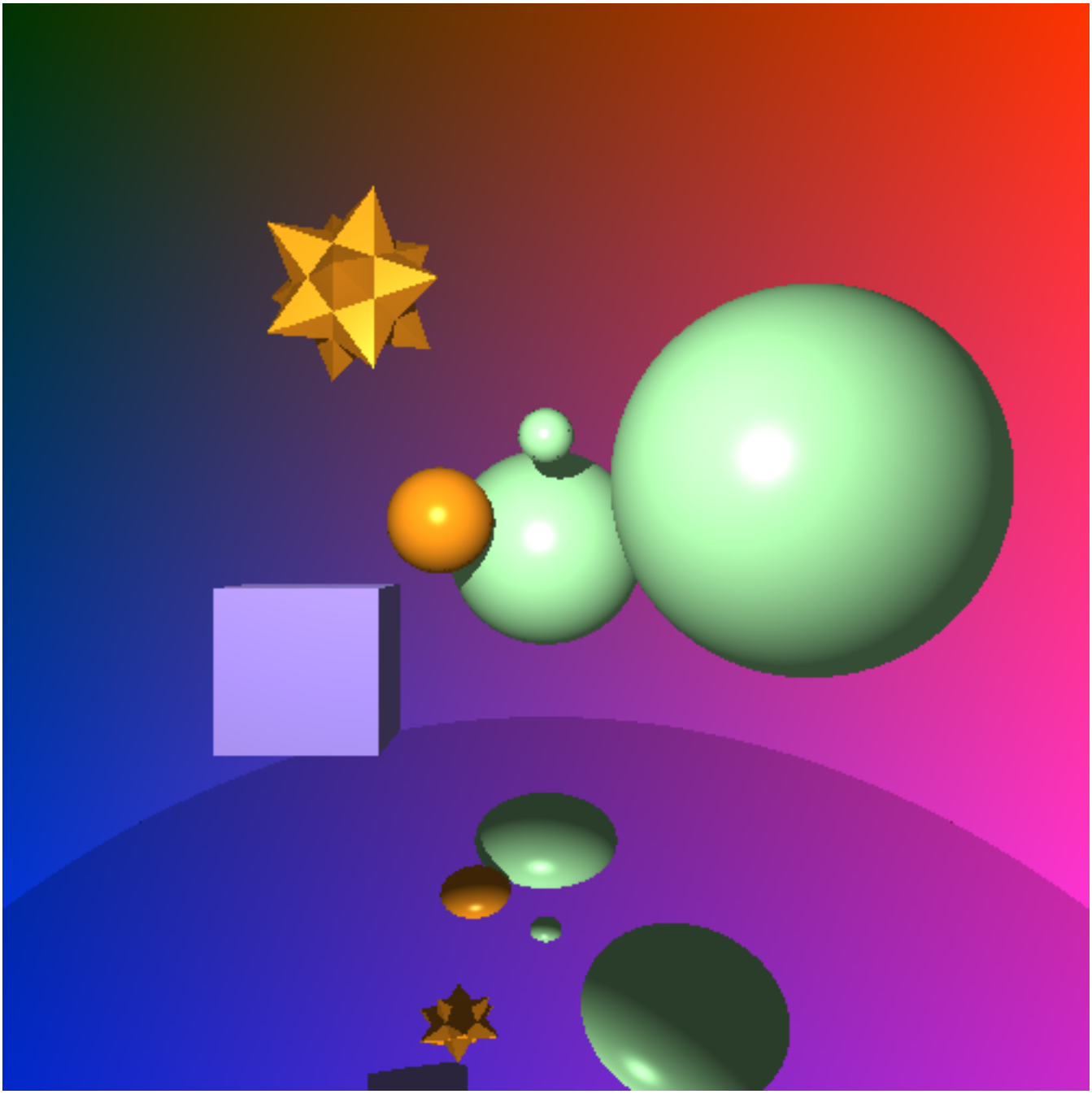


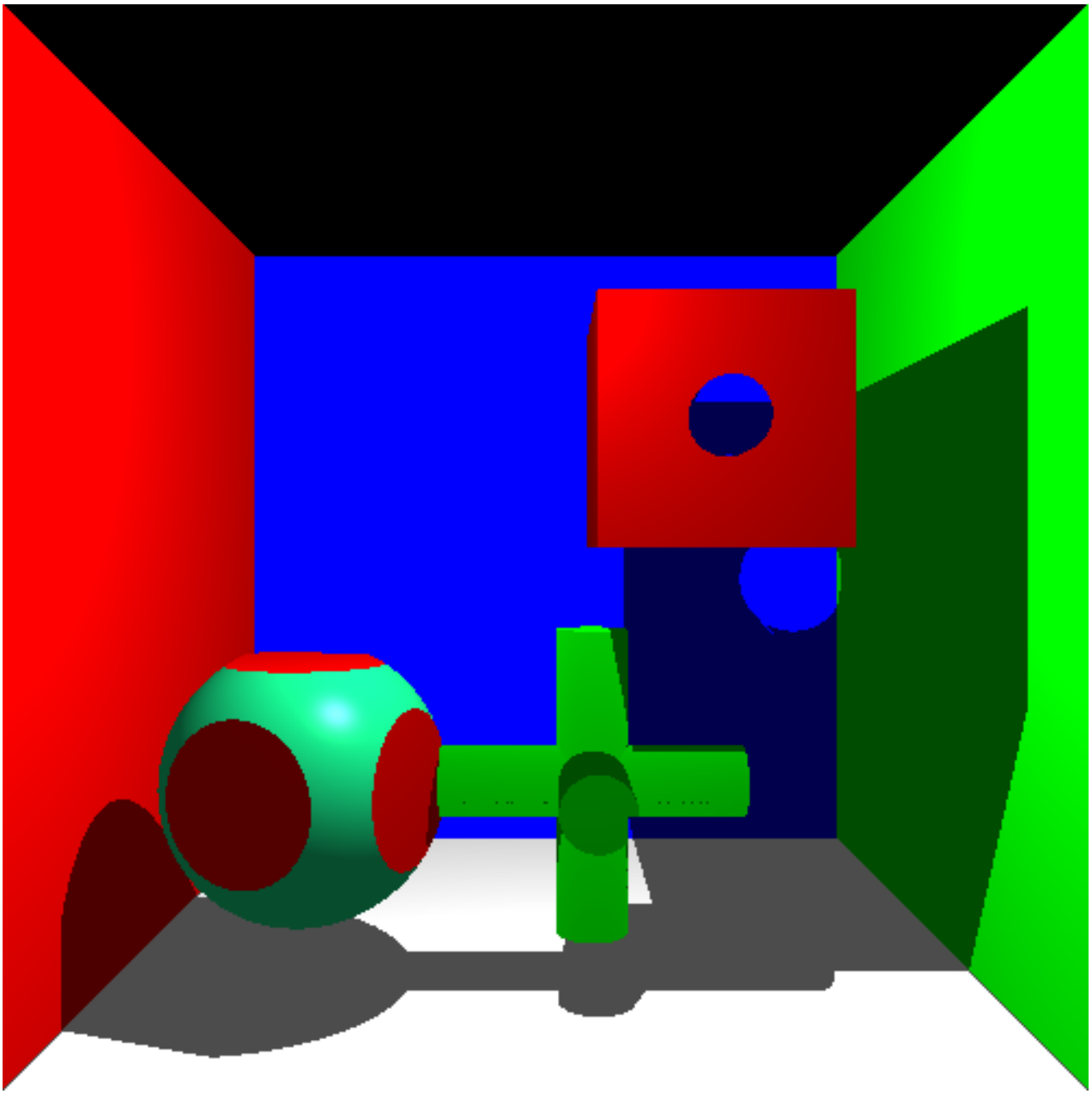
Figure with supersampling (no jaggies)

OBJECTIVE IV MIRROR REFLECTION





OBJECTIVE V CONSTRUCTIVE SOLID GEOMETRY

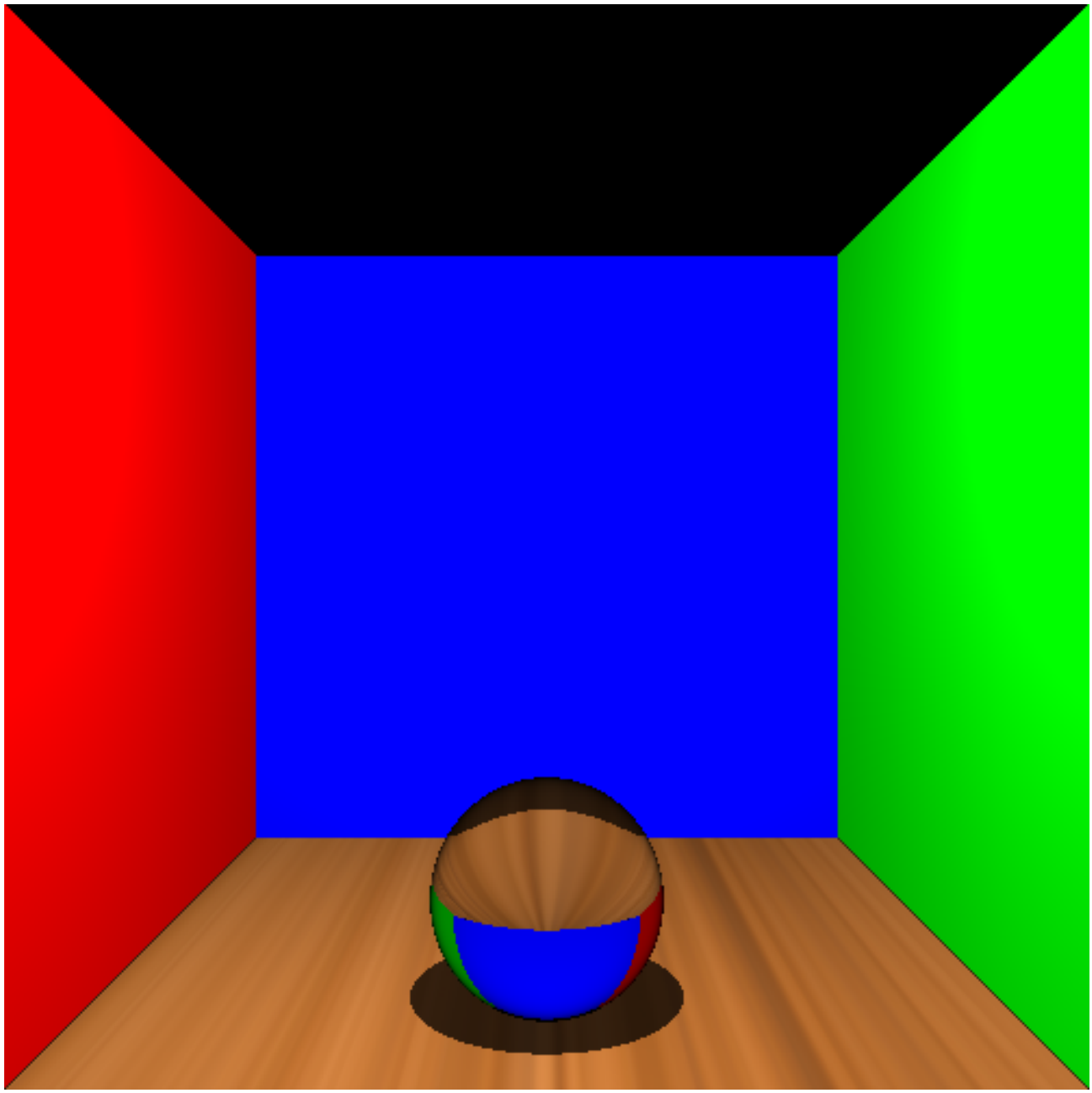


Left: intersection between a sphere and a cube

Middle: unions of three cylinders

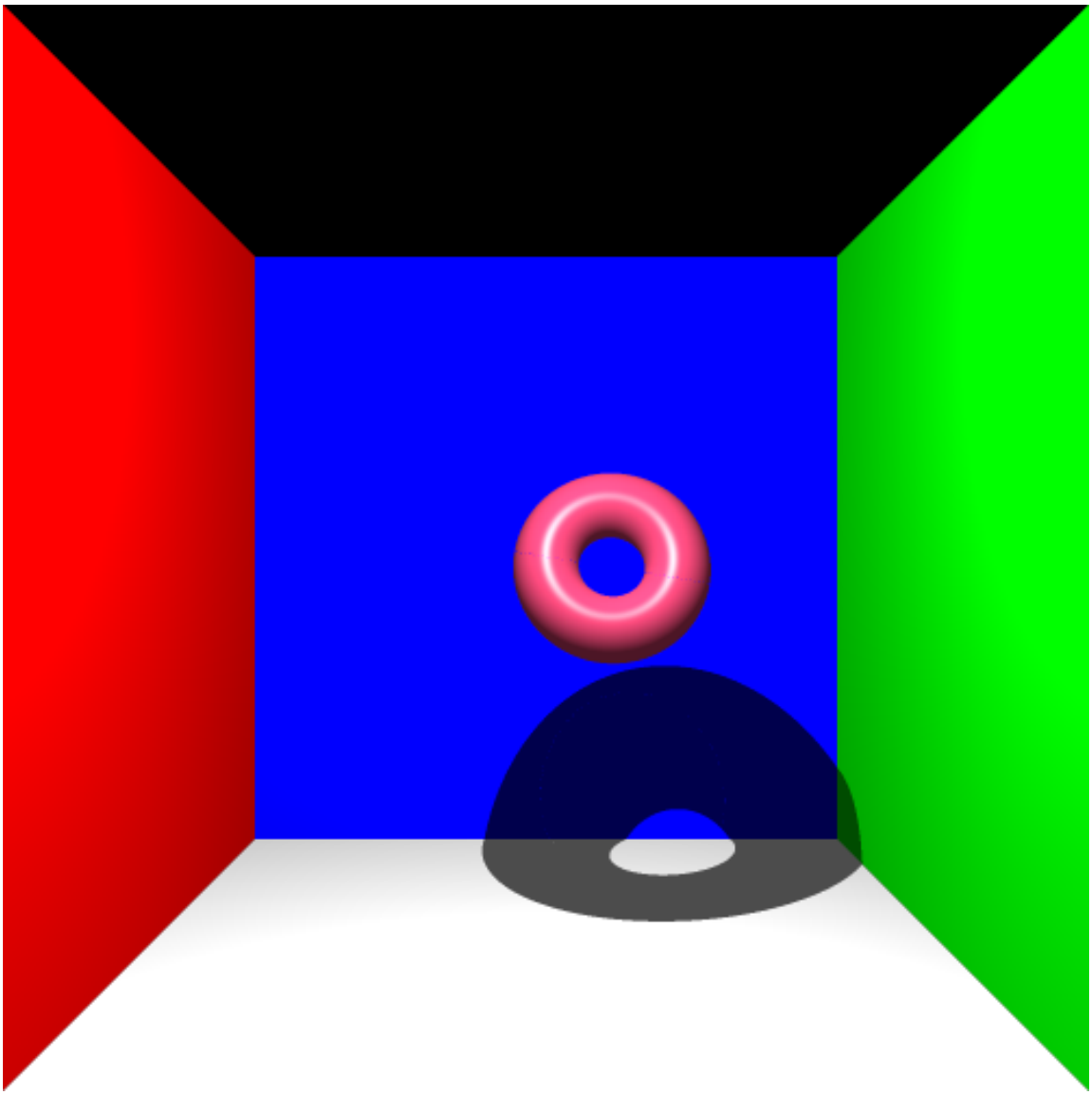
Right: A box minus a cylinder

OBJECTIVE VI REFRACTION

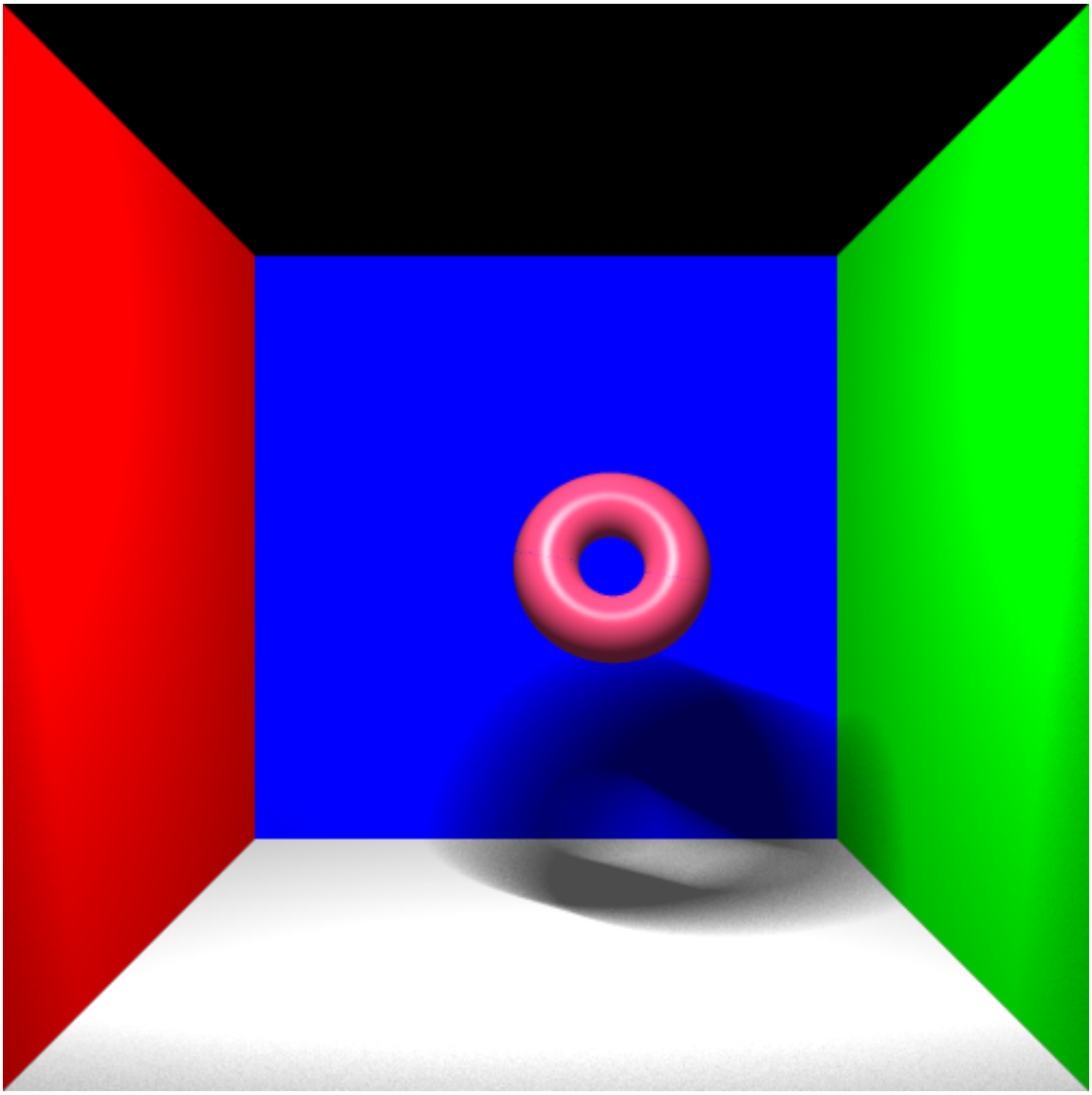


refraction with index of refraction 1.53 (glass-like)

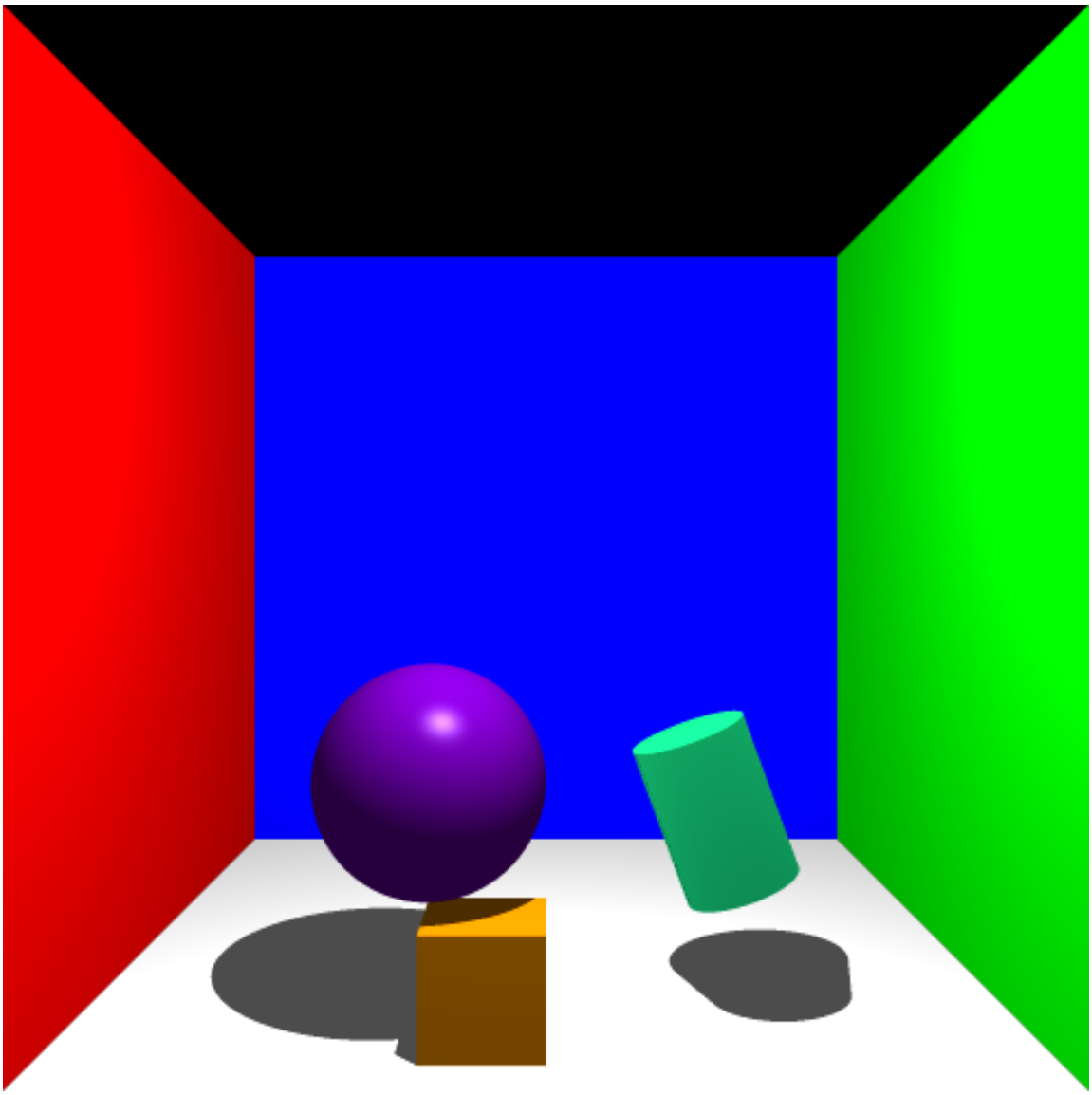
OBJECTIVE VII SOFT SHADOW



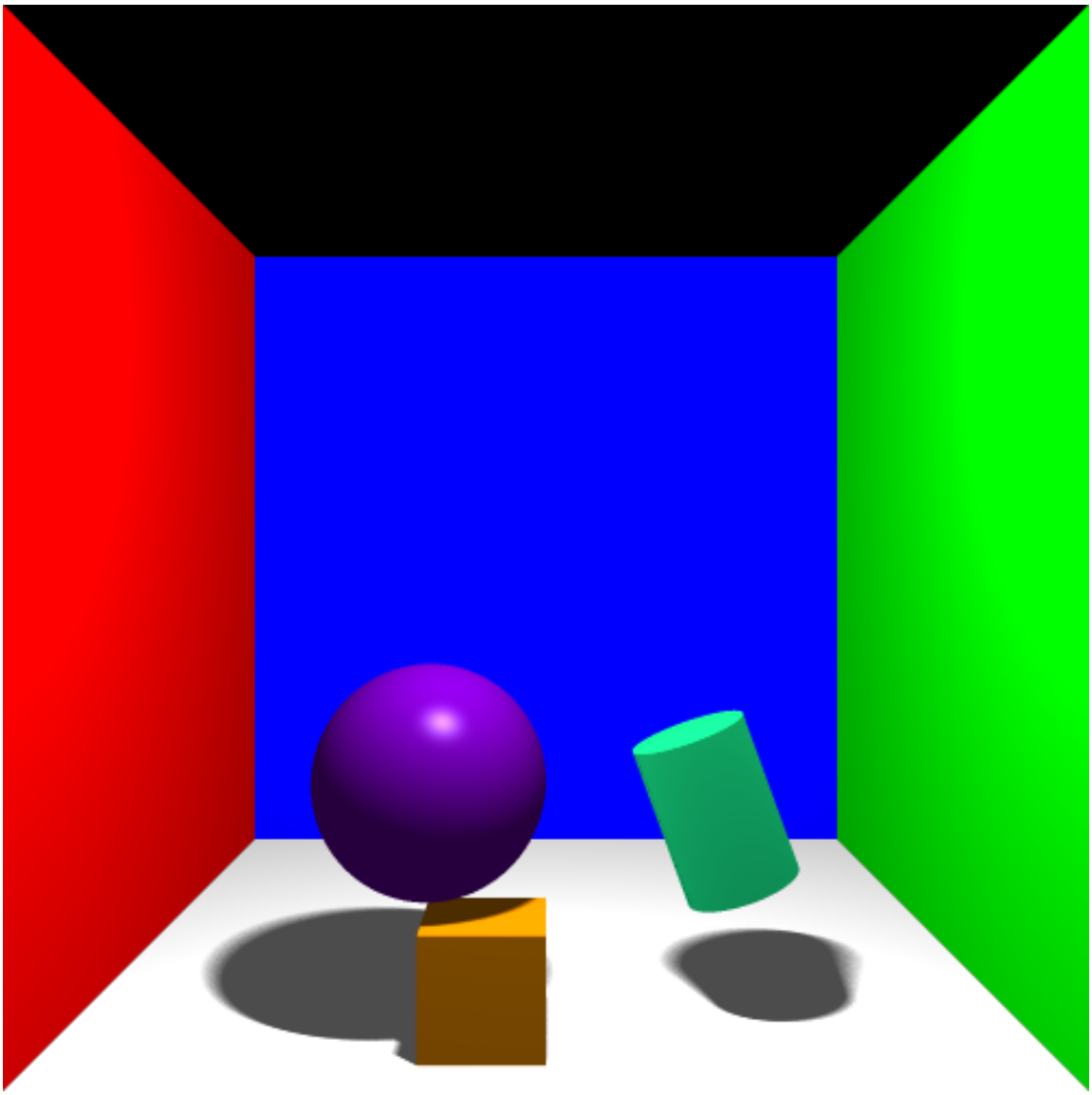
no soft shadow



An area light with width 50 and height 50 with 60 shadow rays casted

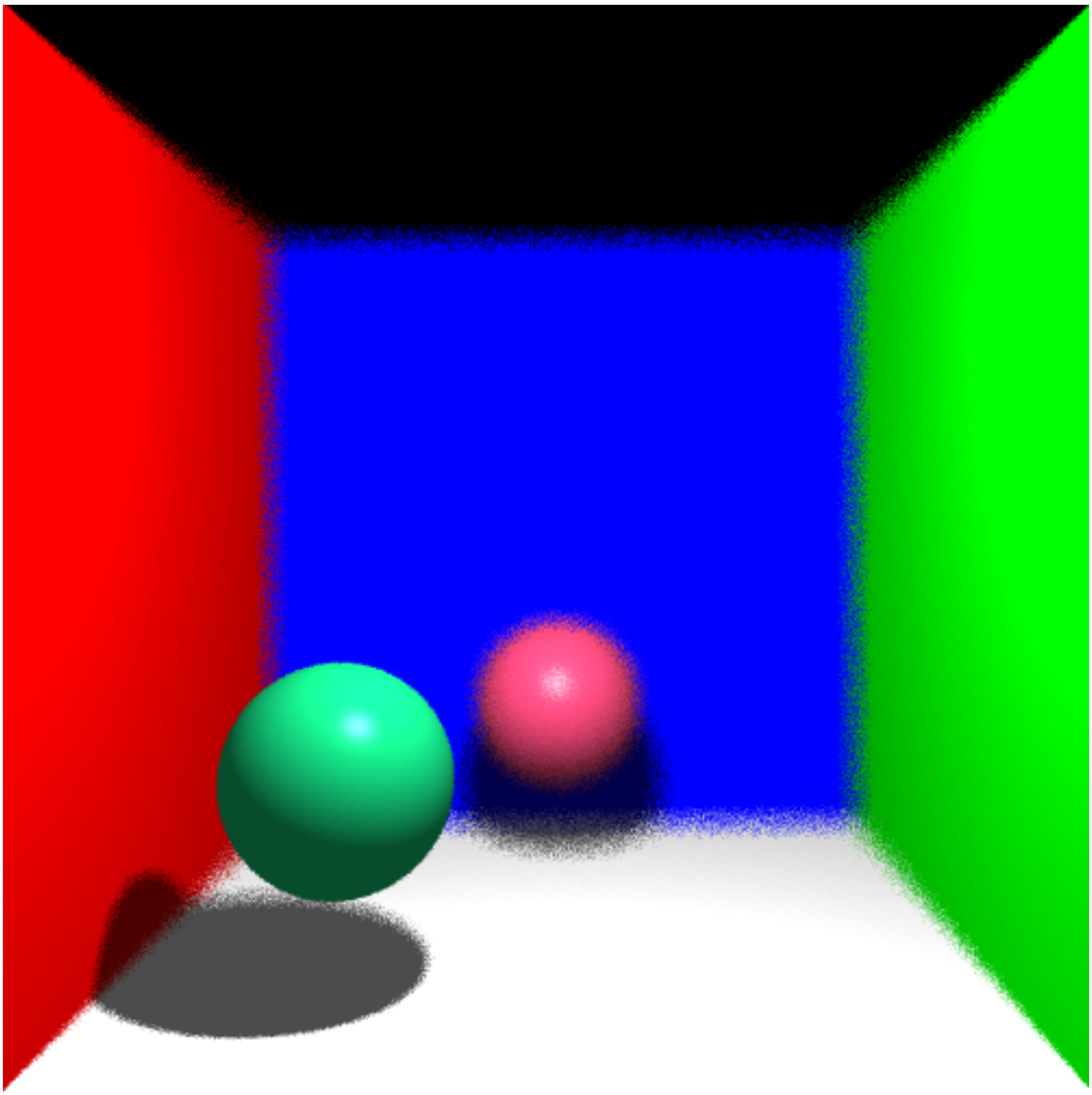


no soft shadow

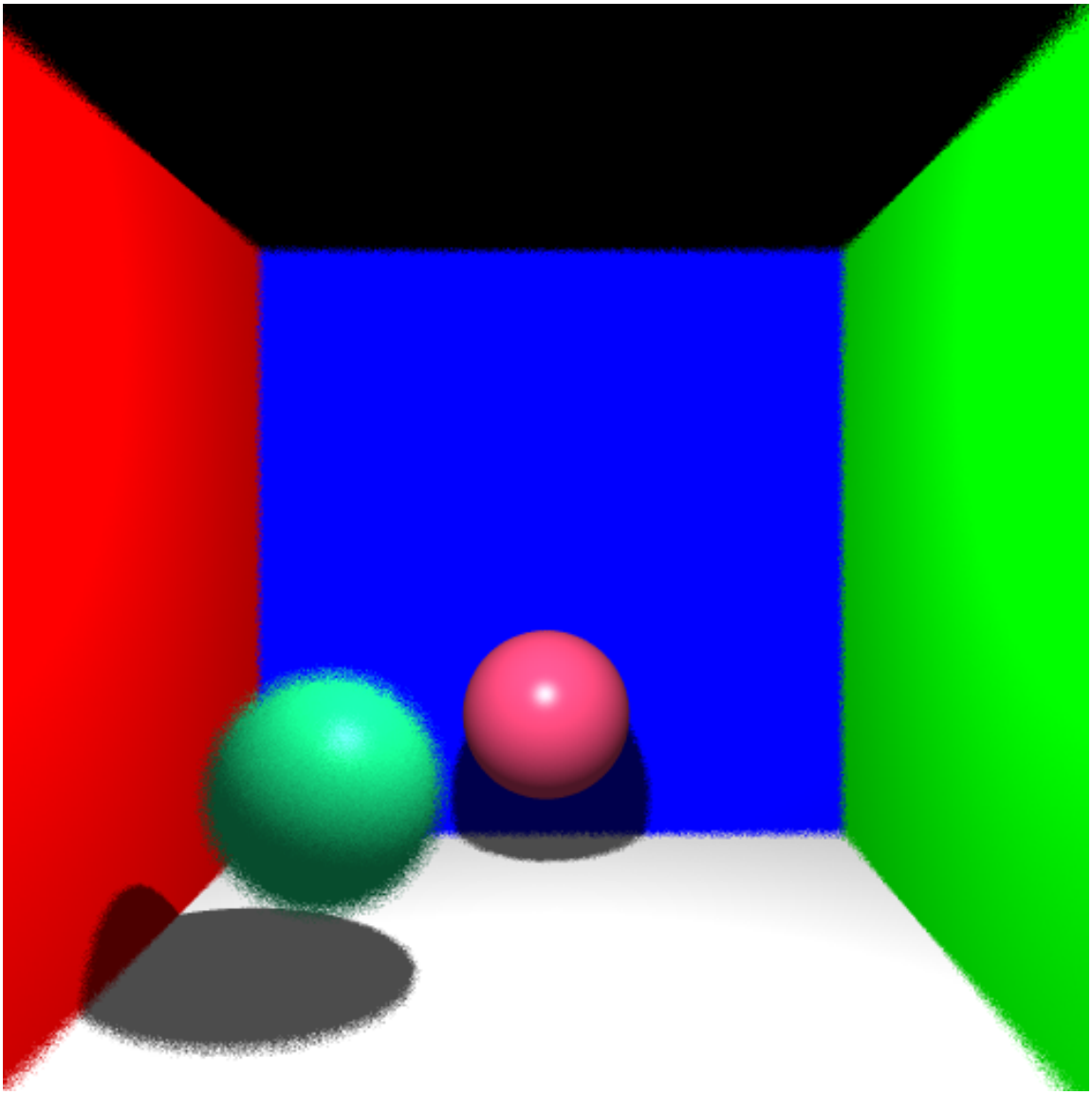


An area light with width 20 and height 10 with 60 shadow rays casted

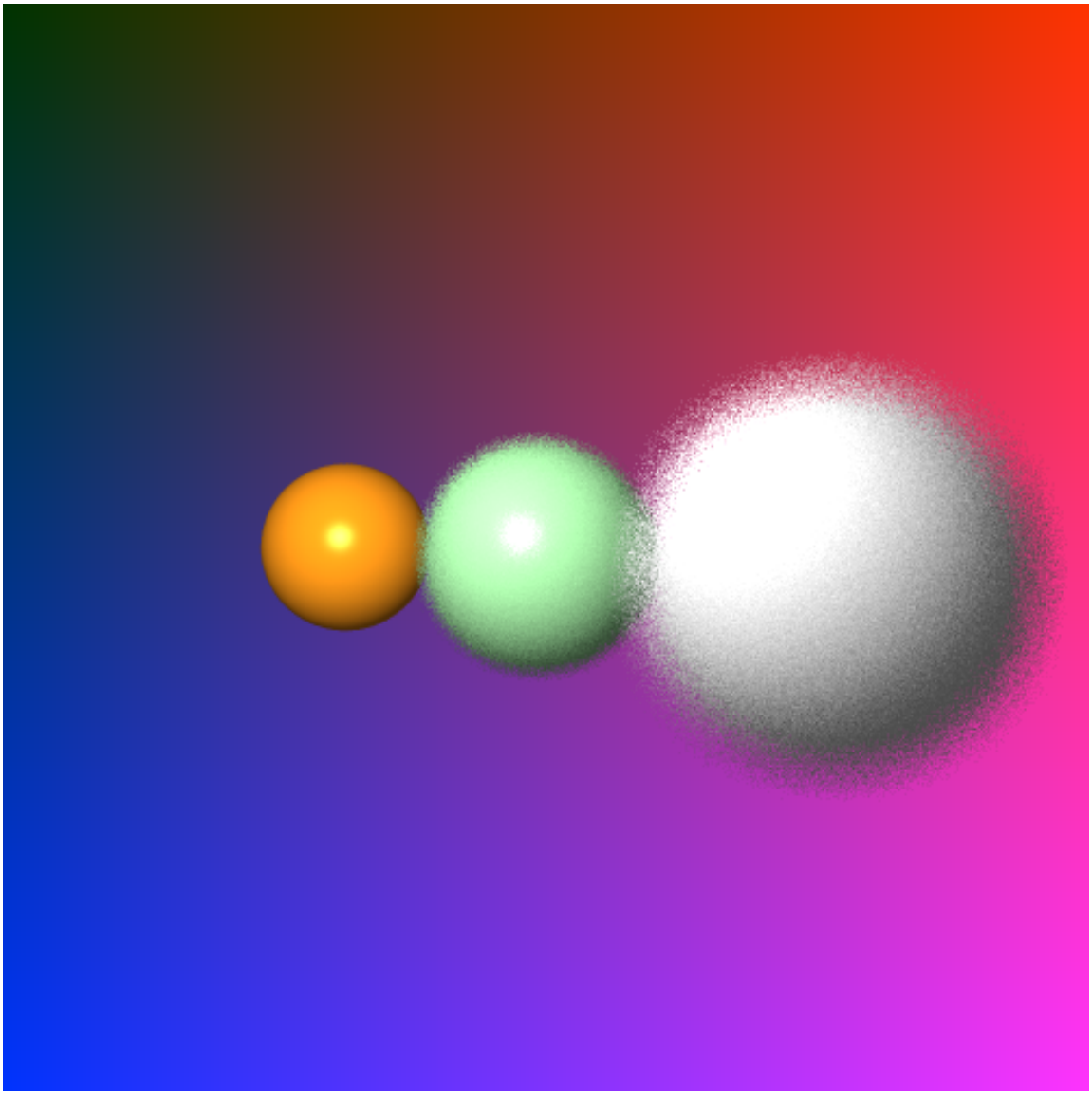
OBJECTIVE VIII DEPTH OF FIELD



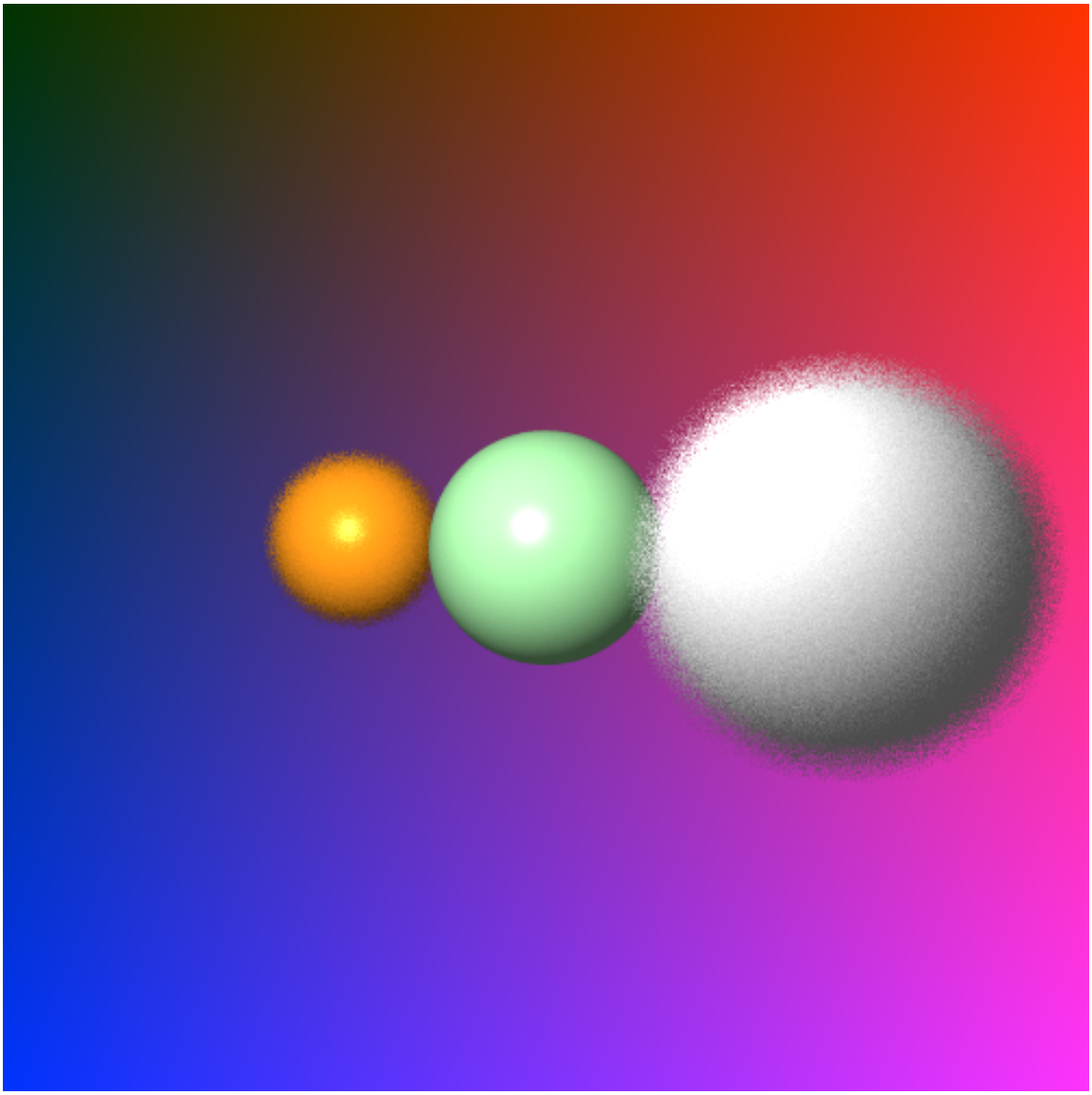
Focusing on the front sphere with aperture radius 35, running 9 samples for each pixel



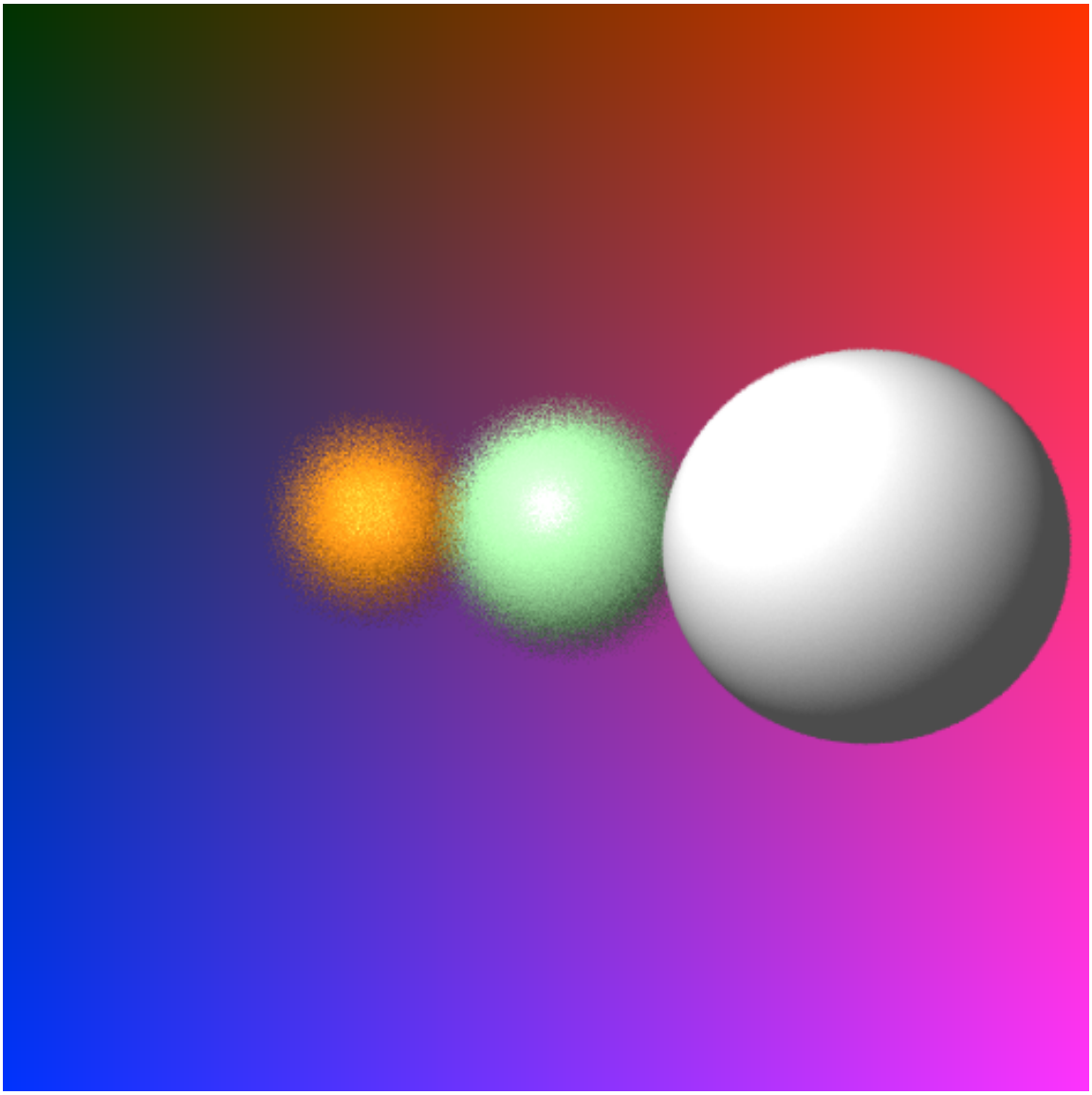
Focusing on the back sphere with aperture radius 35, running 9 samples for each pixel



Focusing on the back sphere with aperture radius 25, running 9 samples for each pixel



Focusing on the middle sphere with aperture radius 25, running 9 samples for each pixel



Focusing on the front sphere with aperture radius 25, running 9 samples for each pixel

OBJECTIVE IX PHONG SHADING

no phong shading

with phong shading

OBJECTIVE X FINAL SCENE

full scene in 256 x 256

final scene without teapot in 500 x 500