Computer Vision Assignment A1

# Question 1

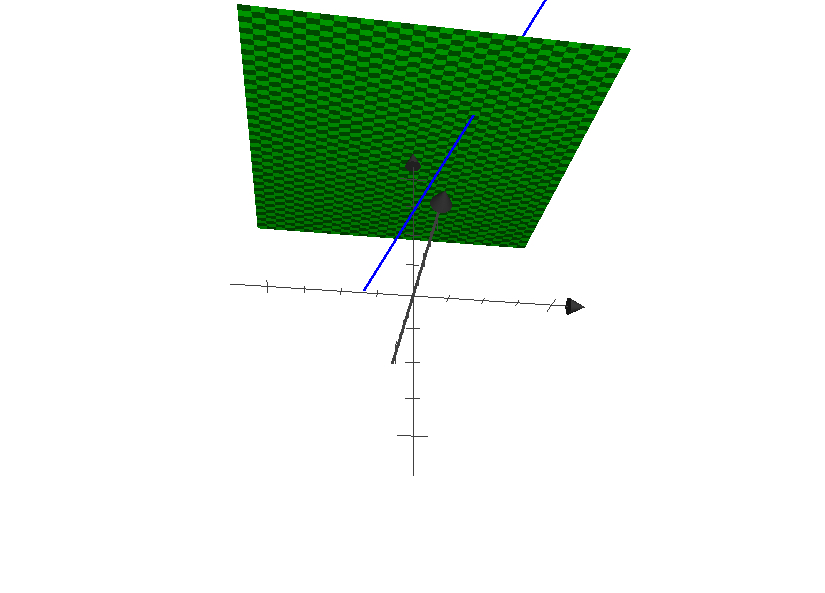


Figure Example projection when f' = 4

# Question 2

## Part 1

Use the Gaussian Lens Formula

Use the image magnification formula

The lens must be placed a distance of away from the object and the relationship between is given by the following equation:

Given that the projected image is half the size of the original object, we can solve for both and .

## Part 2

Use the Gaussian Lens Formula and the values derived above…

## Part 3

Solve the Blur Circle Diameter Equation

Given:

# Question 3

## Part 1

Apply local averaging filter