**ENPM673**

Homework 1

**Problem 1**

1. The field of view θ, can be calculated as,

-1()

where, f and d is the focal length and sensor width respectively. Since the image sensoris

mentioned to be square the sensor width is equal to the sensor height.

Substituting the values of f = 15mm and d = 14mm,

= 2 15.692 = 31.284°

2. The pixel density of the camera = p/mm2

The relationship between the image height and the object height is given as,