

# CS 4391 Introduction to Computer Vision Quiz 2

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## **Problem 1**

Given a stereo pair of images, suppose that a pixel with coordinates  $(x, y) = (140, 240)$  on the left image corresponds to a pixel with coordinates  $(x, y) = (120, 240)$  on the right image. Suppose that the focal length of the stereo camera is 320, and the baseline of the stereo camera is 0.05. What is the depth value of the corresponding pixels?

## **Problem 2**

Given an input image with size  $227 \times 227 \times 3$  (height, width, channel), apply a convolution layer with 56 kernels, kernel size  $11 \times 11 \times 3$ , stride 2. What is the shape of the output of the convolution layer?