Exercise 4
3D Computer Vision

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1   Theory

1. the epipolar line of each point in a pair of rectified images is just along the horizontal scanlines. Thus in rectified images, with knowing a point, the correspondence can be searched along the scanline.

2. The triangulation can be simplified based on rectified images, the Z-coordinate is depend on the disparity. Based on Z-coordinate, focal length, and image point, we can calculate X and Y coordinates.

3. Image rectification is not a good approach in multi-view dense reconstruction, since the correspondences might not exist in any two images at the same time, which could lead to solving a similar triangle problem with infinity scale.