Perception Exercises 2

Estimate the outlier probability:
w_optimistic estimate: 28/(28+49)=0.36, P_inlier=0.64
w_conservative estimate:32/(32+45)=0.42, P_inlier=0.58

We can find how many iterations L we need for a certain success rate by the fumula:

$L=\frac{\log(1-P_{success})}{\log(1-P_{inlier}^{N})}$

We want to have 99% certainty so P_success=0.99
N is the number of points needed for computing homography,
For full homography, N=4.
For affine homography, N=3.
For optimistic estimate with full homography:
L=25
For conservative estimate with full homography:
L=38
For optimistic estimate with affine homography:
L=15
For conservative estimate with affine homography:
L=21