

Problem 2 (due Monday, September 27)

- a) Given three distinct parallel lines on the plane, prove that one can choose one point on each line so that the 3 points are vertices of an equilateral triangle.
- b) Given four distinct parallel planes in the space, prove that one can choose one point on each plane so that the 4 points are vertices of a regular tetrahedron.

The problem was solved by Ashton Keith and Pluto Wang. Pluto's solution to part a) is slightly different from our solutions, while Ashton's solution is similar to our first solution. The provided solutions to part b) are similar to our solution, except that Pluto's solution is a bit sketchy and Ashton's solution is brave enough to provide explicit computation rather than just an existence argument. For details see the following link [Solution](#).

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