Problems ♠–12
Due in DSC 235 by 12 noon, Friday, April 13, 2018

Problem A: There are 9 delegates at a conference, each speaking at most three languages. Given any three delegates, at least 2 speak a common language. Show that there are three delegates with a common language.

Problem B: A set X has n elements, $n \geq 3$. Given $n + 1$ subsets of X, each with 3 members, show that we can always find two which have just one element in common.