

MATH 10B, SPRING 2017, QUIZ 2

(1) Suppose that at a certain college there are only three majors: math, biology and CS.

Also suppose that there are:

- 85 students total
- 50 math majors, 30 biology majors, and 40 CS majors
- 10 double majors in math and biology, 20 in math and CS, and 10 in biology and CS.

How many triple majors are there?

(2) Show that there are at least 250 four digit numbers whose digits all sum to the same value.