

Problem 4: Number of Divisors

Let a, b, c be positive integers greater than 50 such that one of them has an odd number of positive divisors and the other two each has exactly 3 positive divisors. If $a + b = c$, find the values of a, b and c such that c is as small as possible.

As always, show your work, fully explain and justify your answer. A solution mainly obtained by computers or calculators will not be accepted.

Posting Date 2/14/2020. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by noon on 2/29/2020.