

## Problem of the Week-2: Number of Divisors

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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  $a, b, c$  such that  $c$  is as small as possible.

As always, show your work, fully explain and justify your answer.

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Posting Date 1/26/13. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 2/8/13.