

PROBLEM OF THE WEEK 14

Due Wednesday, January 30 at 5:00 pm

Question. Let $a_n = n^2 + 3$ for $n = 1, 2, 3, \dots$. Find the largest positive integer d such that $d|a_n$ and $d|a_{n+1}$ for some $n \in \mathbb{N}$ (i.e. d divides two consecutive terms of the sequence).

- All answers should be clearly explained. Submit it to the Math/Stat Office, AMB 107.
- If your instructor gives you credit for POTW, write his/her name with the class number.
- Contact Bahattin Yildiz with questions: bahattin.yildiz@nau.edu (AMB 134)
- The problems are available online at <https://naumathstat.github.io/problem-of-the-week/>

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