

PROBLEM OF THE WEEK 8

Due Wednesday, November 6 at 5:00 pm

Question. The sequence 1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 16, ... is formed from all positive integers that are either a power of 2 or a sum of two *distinct* powers of 2. Find the 200th term of this sequence. (You need to find this using a mathematical method that can be used to find any term of this sequence. Calculators or Computer programs are not acceptable.)

- 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)