

Transition to Advanced Mathematics: assignments 7-8

Consider the statement: For all $n \in \mathbb{Z}_{\geq 1}$,

$$\sum_{i=1}^n i^2 = \frac{n(n+1)(2n+1)}{6}$$

- 1) Write up a proof of the statement. Do not put your name on it, but rather choose a random number that is unlikely that somebody else would choose.
- 2) Turn in your proof on March 18th. They will be shuffled and given out at random (such that nobody receives his or her own).
- 3) On a separate sheet of paper grade the proof you receive using the proof grading rubric. Explain why you choose the 6 marks that you choose. (Please do not make any marks on the original proof)
- 4) Turn in both pages on March 20th. On your grade sheet write your name as well as the number chosen in (1).

Assignment #7 is the proof itself.

Assignment #8 is grading the proof. An accurate grade is worth full credit.