

MATH 304 HOMEWORK 1

YOUR NAME GOES HERE

DUE SEPTEMBER 7, 2018

Theorem A. Prove that for every positive integer n ,

$$1^2 + 2^2 + 3^2 + \cdots + n^2 = \frac{n(n+1)(2n+1)}{6}.$$

Proof. Induction!

□

Theorem B. Let $a, b \in \mathbb{N}$ and suppose that $a|b$. Then $(a+1) | (b + \frac{b}{a})$.

Proof.

□