

## Problem of the week #6

Due October 11th

**Problem.** Find, with explanation, meaningful values for:

(a)  $1 + 2 + 3 + 4 + \dots$

(b)  $1^2 + 2^2 + 3^2 + 4^2 + \dots$

(c)  $1^3 + 2^3 + 3^3 + 4^3 + \dots$

Solutions ought to use ideas described in the accompanying document Problem 6 Background available on the POW webpage.

- Partial credit may be given for partial answers.
- Each POW will be due the following week at 1pm.
- Questions? Email: [bthorner@unomaha.edu](mailto:bthorner@unomaha.edu)
- Submit solutions to (above email), DSC 210, or DSC 203.
- POWs, solutions, backgrounds, leaderboard available at

[https://www.unomaha.edu/college-of-arts-and-sciences/mathematics/student-opportunities/pow\\_solutions.php](https://www.unomaha.edu/college-of-arts-and-sciences/mathematics/student-opportunities/pow_solutions.php)