ILLINOIS INSTITUTE OF TECHNOLOGY

Department of Applied Mathematics and IIT SIAM Student Chapter

Math Weekly Problem Competition

Friday, February 27, 2015

Let

$$a_n = \frac{1^{\frac{7}{2}} + 2^{\frac{7}{2}} + \dots + n^{\frac{7}{2}}}{n^{\frac{9}{2}}} .$$

Show that $\lim_{n\to\infty} a_n$ exists and find its value.

Join the competition!

The Department of Applied Mathematics and IIT SIAM Student Chapter is organizing a weekly campus-wide math competition for undergraduate students.

- ▷ Every Friday 3pm, visit http://math.iit.edu/~weeklyproblem to view the problem of the week
- ▷ Submit the solution to weeklyproblem@math.iit.edu by Wednesday 5pm
- > The author(s) of the first correct solution(s) will receive a monetary prize

For more details view the official web site http://math.iit.edu/~weeklyproblem.

Become a Math Club member and receive problem notifications by email.

Good Luck! Have fun and enjoy Mathematics!