
Virginia Tech Math Contest, Oct. 21

Location: LSU Campus, TBA Registration Deadline: Sep. 30

Putnam Exam, Dec. 2

Location: Lockett Hall Registration Deadline: Oct. 3

Math Problem-Solving Seminar!!

Every Wednesday, 5:00 - 6:30 P.M. Third-Floor Lockett Lounge

Open to any **Undergraduate**[†] Student

Free Pizza dinner provided!!

[†] Calculus (MATH 1550) is a required prerequisite.

Are you interested in challenging and fun Math Problems? Attend the weekly Problem-Solving Seminar and sign up to represent LSU in national Competitions! Everyone is welcome: you do **not** need to be a math major! Sample problems:

- Without using a calculator, determine which quantity is larger:

$$\sqrt{2000} - \sqrt{17} \quad \text{or} \quad \sqrt{2001} - \sqrt{18} ?$$

- Evaluate the following integral – the answer is **very** simple!

$$\int_0^1 \frac{3x^3}{2} + \sqrt[3]{\log_3(2x+1)} dx = ?$$

- Find all n such that $\left(\frac{11}{2}\right)^n + \left(\frac{21}{2}\right)^n$ is an integer.
- Is it possible to write down a list of distinct real numbers $x_1, x_2, \dots, x_{2017}$ so that there is no subsequence of length 45 that is completely increasing or decreasing? What about length 46?

To register or learn more about the Competitions, please attend the Problem-Solving Seminar, visit the website below, or write to Professor Karl Mahlburg.

e-mail: mahlburg@math.lsu.edu

Website: www.math.lsu.edu/~mahlburg/teaching/Putnam.html
