## Virginia Tech Math Contest, Oct. 26

Location: Lockett Hall Registration Deadline: Sep. 27

Putnam Exam, Dec. 7

Location: Lockett Hall

Registration Deadline: Nov. 1

## Math Problem-Solving Seminar!!

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

Open to any  $Undergraduate^{\dagger}$  Student

 ${\bf Free} \ {\rm Pizza} \ {\rm dinner} \ {\rm provided}!!$ 

† Calculus (MATH 1550) is a 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:

• Find all integers a and b that are solutions to the equation

$$\frac{1}{a} + \frac{1}{b} = \frac{4}{2019}.$$

- Let  $f(x) = xe^{2x^3}$ , and evaluate f'(0). Now evaluate  $f^{(7)}(0)$  without explicitly calculating the seventh derivative of f(x)!
- Is it possible to place ten coins in a pyramidal configuration so that there are **not** three coins with the same face that form an equilateral triangle? The triangle may be of any size. The figure to the right fails, as there is an equilateral triangle formed by three Heads (can you find it?).



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