The fall meeting of the Luzerne County Council of Teachers of Mathematics will be held at the Wyoming Seminary Upper School on Thursday, October 21, 1999. The meeting is scheduled to begin at 7:00 pm and will be held in Sprague Hall, Room 219. Refreshments will be provided.

Note: The solutions to the exams will not be available on the web! Why take all the fun out of it? Also, copies of LCCTM newsletters will also be available on our website.
If a student asks, how do you answer?

1. Why can't we divide by zero?
2. Why is a negative number multiplied by a negative number a positive number?
3. What is the difference between addition and subtraction of integers?
4. Why is \( \ln x \) called "natural" logarithm?
5. How do we calculate \( \pi \)?
6. How do we calculate \( e \)?
7. \( \int \frac{1}{x} \, dx = 1 + \int \frac{1}{x} \, dx \Rightarrow 0 \equiv 1 \) ?? (integration by parts)
8. Do imaginary numbers really exist?

- to be discussed at the fall meeting -

\[ e^{\frac{1}{2} \pi i} = i \Rightarrow e^{\frac{1}{2} \pi i} = i \Rightarrow e^{\frac{1}{2} \pi i^2} = i^i \Rightarrow e^{\frac{1}{2} \pi} = i^i \]

\[ \therefore i^i = 0.2078795764 \]

\[ \pi = 3.141592653589793238462643383279 \]

Now I, even I, would celebrate
In rhymes inept
The great immortal Syracusan,
Rivaled nevermore
Who, in his wondrous love, passed on before,
Left men his guidance how to circles mensurate.

- mnemonic for \( \pi \) (30 places)