Math League News

■ **Our Calculator Rule** Our contests allow both the TI-89 and HP-48. You may use any calculator without a QWERTY keyboard.

■ **Use the Internet to View Scores or Send Comments** to comments@mathleague.com. At www.mathleague.com, you can view scores before they arrive in the mail! It took Kay Tipton & Debby Stepelman 10 minutes to enter each student score. *We discussed this problem with our Internet Service. They made adjustments to prevent delays in the future.*

■ **Dates of Final HS Contest & Algebra Contest** Our final contest of this school year is April 10. This is the 13th year of our annual April *Algebra Course I Contest*. There's still time for your school to register. Go to **www.mathleague.com**.

■ **2007-2008 Contest Dates** The good news is that our Internet Score Report Center allows us to move contest dates forward. We can now schedule the 6 contests to avoid AMC conflicts, to be held 4 weeks apart (mostly), and to end in March, as many have requested, not April. Next year's contest (and alternate) dates, all Tuesdays, are: Oct. 23 (16), Nov. 20 (13), Dec. 18 (11), Jan. 15 (8), Feb. 12 (5), Mar. 18 (11). If you have a conflict or scheduled regional testing, put an alternate date on your calendar now!

■ **Rescheduling A Contest & Submitting Results** Do you have a scheduling problem? If school closings **or testing days** mandate contest rescheduling, our rules permit you to use an alternate contest date. Try to give our contest the **previous week**, so the results can still submitted on time. Report your scores by Friday of the official contest week. If scores are late, attach a brief explanation. Late scores unaccompanied by such an explanation are not accepted.

■ **End-of-Year Awards** Engraving of awards begins April 21. We give plaques to the highest scoring school in each region and to the 2 schools and 2 students with the highest totals in the entire League. *Winning schools must submit their results to our Internet Score Report Center by April 13*. Results submitted later *cannot* be used to determine winners. A teacher once asked "*Has there been any thought to using enrollment figures to divide the schools into divisions? Personally, I do not care if we ever receive any team recognition, as my students enjoy the mathematical challenges provided.*" Our groupings are not organized to "even out" the competition. Competition is one feature of our academic enrichment activity, but enrichment should be the main goal. Only a few schools can expect to win, but all schools can profit.

■ **General Comments** JoAnn Roesch thanked us "for providing an opportunity to compete with other students." Harry Weiner said "This was the most challenging contest." Denny Cook's kids "thought this was by far the most difficult one in a long time." Paulette Sirakos' students "found this to be significantly more difficult."

■ **Problem 5-1: A Comment And A Correction** Tiffin James said he'll "have to do a better job explaining why 1 isn't a prime number." Jon Mormino noted that the *solution* to 5-1 should say "$k \geq 1$" where it currently says "$k > 1$."

■ **Problem 5-3: An Appeal (Denied)** One advisor asked "Is infinity an acceptable answer?" Since the question asks for a real number, the only correct answer is 0.

■ **Problem 5-5: Calculators And Logs** Laila Kalnins said "5-5 was a great algebraic challenge [except to] those who had a TI-89. They only needed to know the Change of Base Theorem, and the calculator did the rest. All the calculus students got this one correct." Mike Loken said "Two students graphed each side as a function and found the two points of intersection." John Burnette said "I love your contests. They are usually chock full of interesting twists and often feature problems which illuminate relationships kids often overlook. Question 5-5 was one such question. But when I entered 5-5 into a TI-89 and hit solve, out popped the exact answer. I am not comfortable with a policy that favors schools where each student has a $150 calculator." We do review questions for calculator usage. When I wrote this question, I reasoned (incorrectly) that the key step was the Change of Base Theorem, and that the rest was routine algebra. I was wrong! When we assemble our contests, calculator use is always considered. We did not view this one correctly. Judy Mendaglio said "The younger students are discouraged when questions are unfairly geared to Grade 12 students and are not accessible to students in lower grades." We promise that a geometry student has learned enough to do at least 3 (and often more) of the 6 questions. Our contests cover the entire HS curriculum, through pre-calculus. Each year, we give at least one question on logs, series, trig, and various other topics. After seeing how others attack such problems, students may be able to do such problems themselves. Learning outside the classroom can be very exciting!

■ **Solution to 5-6: A Correction** Jon Mormino said that "2000 appears twice where 2007 was intended." How true!

Statistics / Contest #5

Prob #, % Correct (all reported scores)

5–1	86%	5–4	27%
5–2	65%	5–5	21%
5–3	59%	5–6	19%