Math League News

■ **Use the Internet to View Scores or Send Comments** Just go to http://www.mathleague.com and look around!

■ **Dates of Final HS Contest & Algebra Contest** Our final contest is Apr. 11. This is the 12th year of our annual April *Algebra Course I Contest*. To participate, go to www.mathleague.com.

■ **2006-2007 Contest Dates** Next year's contest dates (and alternates), all Tuesdays, are: Oct. 24 (17), Nov. 28 (21), Jan. 9 (2), Feb. 6 (Jan. 31), Mar. 6 (Feb. 27), and Apr. 10 (3). If you have a conflict (such as the AMC or scheduled statewide testing), putting the alternate date on your calendar right now helps!

■ **Rescheduling A Contest & Mailing Results** If there's a schedule difficulty, note that, when " school closings **or testing days**" so require, our rules allow you to use an alternate contest date. We prefer that you use the **previous week**, so we get the results on time. Mail scores by Friday of the official contest week. If scores are late for due cause, attach a brief explanation. Late scores unaccompanied by such an explanation are not normally accepted.

■ **End-of-Year Awards** Engraving of awards begins Apr. 22. 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 postmark their results by April 14.* Results postmarked 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 only one feature of our academic enrichment activity, not its most important one. Enrichment is the main goal, since few schools can expect to win.

■ **High Scoring Students & The Cumulative Column** Completion of the cumulative column is optional, but student awards are based only on scores *regularly* listed in that column. On the most recent score reports, some cumulative scores were reported for students for whom scores were not reported for every prior contest. We are unable to verify these cumulative scores, so we must treat them as *unofficial*. If this affects one of your students, please contact us *promptly*. Note that student certificates of merit were enclosed with Contest 5 for your school's high scorers.

■ **A Rescheduled Contest** One school had a special county math competition in March. Since *our rules allow schools to reschedule contests when such disruptions of the normal school day occur*, a rescheduled time was set on bus on the way back. When several of the best students did not come to the makeup, they were asked why. It seesm that they'd been told about the questions and dis-

qualified themselves but kept quiet so other students could have a fair contest. Great kids! None will become a politician!

■ **General Comments** Irene Stein said "Once again, the Math League has been an enlightening and pleasurable experience for my students." Pam Cook noted that Contest #5 was given on March 14 (3/14), often called "Pi Day," and expressed surprise that we has no pi-related question. (OOPS!) Richard Morrow wrote "Again, we enjoyed the experience. You contests are a valuable addition to the curriculum." Evagrio Mosca said "The contests are great, and the Web site is spectacular—easy to navigate and very helpful, too. I've been in the Math League for 25 years, and I am continually impressed." Walterine Matthews said "Our school has lots of challenges, so even participating in a math contest is an achievement. I am proud of our students and I hope next year we can continue what has been started."

■ **Problem 5-6: Two Much Simpler Alternate Solutions** Student Jacob Sharpe sent us the diagram shown. He noted that drawing the segment that splits one of the isosceles trapezoids into an isosceles triangle and a parallelogram makes it clear that the length of the longest dark segment equals the sum of the lengths of the two dark segments parallel to it.
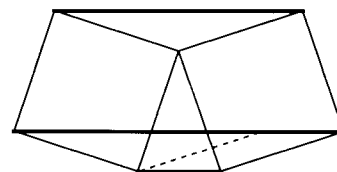
Dick Gibbs sent us the next beautiful solution to problem 5-6. He extended the sides of the squares as shown. Let the length of each extension be x. Let the length of a side of the square be S. Prof. Gibbs noted that the new diagram contains 3 similar isosceles triangles. The legs of the smallest of the triangles have length S, those of the "top" isosceles triangle have length x, and the legs of the big isosceles triangle have length $S+x$. By similarity, the length of the base of the large triangle is equal to the sum of the lengths of the bases of the other two triangles.
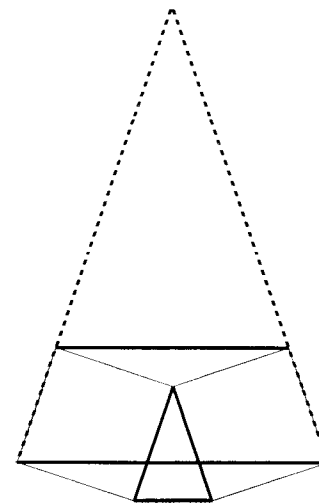
Statistics / Contest #5

Prob #, % Correct (top 5 each school)

5-1	97%	5-4	70%
5-2	91%	5-5	44%
5-3	96%	5-6	16%