



# 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. You can see your results at [www.mathleague.com](http://www.mathleague.com).

■ **Upcoming Contest Dates & Rescheduling Contests** Contest dates (and alternate dates), all Tuesdays, are February 10 (February 17) and March 17 (March 24). If **vacations, school closings, or special testing days** interfere, please reschedule the contest. Attach a brief explanation, or scores will be considered unofficial. We sponsor an *Algebra Course I* Contest and contests for grades 4, 5, 6, 7, and 8. Get information and sample contests at [www.mathleague.com](http://www.mathleague.com).

■ **Carefully Check Your Contest Package—Disregard Incorrect “2013-2014” Designation** Without opening any contest envelope, please check that the remaining envelopes are numbered 5 and 6. If you’re missing a contest envelope, e-mail [dan@mathleague.com](mailto:dan@mathleague.com) with your name, the school’s name, the full school address, and the number of the contest envelope you’re missing. We’ll mail you another set of contests right away. Please note that the envelopes containing the six contests have the year’s schedule printed on them. While the schedule is correct, the heading has the wrong year. Please disregard the “2013-2014” heading.

■ **2015-2016 Contest Dates:** We schedule the six contests to be held four weeks apart (mostly) and to end in March. Next year’s contest (and alternate) dates, all Tuesdays, are October 13 (Oct. 20), November 10 (Nov. 17), December 8 (Dec. 15), January 12 (Jan. 19), February 9 (Feb. 16), and March 15 (Mar. 22). Have a testing or other conflict? Now is a good time to put an alternate date on calendar!

■ **What Do We Publish?** Did we not mention your name? *We use everything we have when we write the newsletter.* But we write the newsletter early, so sometimes we’re unable to include items not received early enough. We try to be efficient! Sorry to those whose solutions were too “late” to use.

■ **T-Shirts Anyone?** We’re often asked, “are T-shirts available?” The logo lets us recognize fellow competitors!” Good news — we have MATH T-shirts in a variety of sizes at a **very** low price. Use them as prizes for high or even perfect scores, or just to foster a sense of team spirit! The shirts are of grey material and feature a small, dark blue logo in the “alligator region.” A photo of the shirt is available at our website. There’s one low shipping charge per order, regardless of order size. To order, use our website, [www.mathleague.com](http://www.mathleague.com).

■ **Contest Books Make A Great Resource** Have you seen our contest books? Kids love to work on past contests. To order, use our website, [www.mathleague.com](http://www.mathleague.com).

■ **Administer This Year’s Contests Online** Any school that is registered for any of our contests for the 2014-2015 school year may now register at <http://online.mathleague.com> for the 2014-2015 Online Contests at no cost. The advantages of administering the online versions of our contests rather than the paper and pencil ones are that you do not have to grade your students’ papers and that you do not have to submit any scores at our Score Report Center ~ these tasks are done automatically for you when your students take our contests online. If you decide to use this free service, you must set up your account and set the day you are going to administer each contest at least one day in advance of the actual contest date.

■ **General Comments About Contest #4:** Chip Rollinson said, “Nice set of questions.” Peter Knapp said, “A good contest as usual.” Mark Luce said, “I liked this contest. A good selection of algebra, geometry, and probability problems.”

■ **Question 4-2: Comment:** Chip Rollinson said, “I was amazed by how many students got 4-2 wrong (and answered sqrt(34)), missing a more obvious case.”

■ **Question 4-6: Comments and Alternate Solutions** Chip Rollinson said, “For question 4-6, I saw a variety of correct methods and a couple of lucky/incorrect ones that arrived at the correct answer. Most students correctly applied the Triangle Angle Bisector Theorem. One student assumed that the angle bisector of the center top angle had integral length and that the answer was integral and plugged in numbers until something worked. Worse yet, several students assumed that the two right-most segments of the base would be in the same ratio the two other sides of the entire triangle ( $112/84=x/(56-x)$ ). This works for THIS triangle! Lucky indeed.” Peter Knapp said, “#6 is particularly interesting. It would have been extremely hard on a non-calculator competition. Some students recognized it as a Law of Sines/Law of Cosines problem and solved it by finding angles of the large triangle ~ much easier (though less eloquent) this way than the presented solution!” Mike Jantz submitted an alternate solution from one of his students who similarly used the law of cosines twice to find the large triangle’s angles and then the law of sines. Mark Luce said, “Problem 6 [was] an excruciating geometry problem that probably would have taken me the better part of an hour to figure out. Bizarrely enough, I had one student—usually a very good math student—who solved problem 6 correctly, but NONE of the others!”

<b>Statistics / Contest #4</b>			
Prob #, % Correct (all reported scores)			
4-1	86%	4-4	62%
4-2	48%	4-5	19%
4-3	37%	4-6	21%