



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

■ **Dates of Final HS Contest and Algebra Contest** Our final contest of this school year is March 10 (with an alternate date of March 17). In addition, this year happens to be the 33rd year of our annual April *Algebra Course I* contest. There's still time for your school to register! Go to [www.mathleague.com](http://www.mathleague.com).

■ **2026-2027 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 20 (Oct. 27), November 17 (Nov. 24), December 15 (Dec. 22), January 12 (Jan. 19), February 9 (Feb. 16), and March 16 (Mar. 23). Have a testing or other conflict? Now is a good time to put an alternate date on calendar!

■ **Rescheduling a Contest and 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 the contest the week after the regularly scheduled date. If scores are late, attach a brief explanation. Late scores unaccompanied by such an explanation will not be accepted.

■ **End-of-Year Awards** Engraving of awards begins April 1st. We give plaques to the highest-scoring school in each region and to the 2 schools and the 2 students with the highest totals in the entire League. *Winning schools must submit their results to our Internet Score Report Center by March 31st.* 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 two divisions? Personally, I don't care whether 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.

■ **Misspelled Student Name?** An advisor wrote to us to request that the spelling of a student's name, which he had entered incorrectly for previous contests, be changed. We do not make such corrections, because you can! Any advisor in this position should return to the Score Report Center and click on "Late Submissions" for whichever contest has a name or score that needs correcting.

■ **General Comment about Contest #5:** Robert Morewood said, "Thanks for another stimulating contest!"

■ **Question 5-2: Comment** Robert Morewood said, "Perennial advice to students: READ the question!"

■ **Question 5-4: Comment** Robert Morewood said, "The completing the square solution is very nice! Many students noted that, for a zero sum, either  $y^6 - 16y^3$  or  $x^4 - 8x^2$  must be negative, which leads to a very short list of integers to check! Even better, parity considerations force  $x$  to be even, which forces  $y$  to be even, shortening that list to just  $y = 2$  or  $x = \pm 2$ ; don't overlook that negative! (I find it amusing that this non-exclusive 'or' becomes 'and' in the end!)"

■ **Question 5-5: Comment** Robert Morewood said, "The guessers noted that the desired square area ought to be around half the area of triangle (Heron's rule if you don't notice the right angle). So, perhaps a perfect square close to 147..."

■ **Question 5-6: Comments** Robert Morewood said, "Thank you for the opportunity to talk about imaginary numbers! (Those have, sadly, been removed from our local curriculum.)" Peter Knapp said, "Arrgh! 5-6 was a great problem for using the polar form of complex numbers! Sadly because of the huge snow storm at the end of January, my Precalc students taking this test are still 1 week away from being taught about that... If only..."

## Statistics / Contest #5

Prob #, % Correct (all reported scores)

5-1	89%	5-4	24%
5-2	47%	5-5	26%
5-3	67%	5-6	4%