

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!

■ Dates of Final HS Contest and Algebra Contest Our final contest of this school year is March 11 (with an alternate date of March 18). In addition, this year happens to be the 32nd year of our annual April Algebra Course I contest. There's still time for your school to register! Go to www.mathleague.com.

■ 2025-2026 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 14 (Oct. 21), November 11 (Nov. 18), December 9 (Dec. 16), January 13 (Jan. 20), February 10 (Feb. 17), and March 10 (Mar. 17). 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 Match 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.

■ Question 5-2: Comment Robert Morewood said, "I was at first disappointed that no one tried just substituting values for *A* and *B* into the sine equation and solving for *C*, then substituting *A*, *B*, & C into the cosine expression. (The $\sin^2(x) + \cos^2(x) = 1$ identity appears very late in our local curriculum with only a few students knowing it.) However, talking to students, I realized that those who did not know the identity would not know the \sin^2 notation, and their calculators would not either! Post contest, I like to encourage technology-assisted investigations. Here is a 2D investigation of triangles satisfying the given equation: <u>https://www.desmos.com/</u>calculator/ildfg1ikgc And a full 3D investigation of the equation: <u>https://www.desmos.com/3d/apn7pikpgu</u>."

Question 5-3: **Comment** Robert Morewood asked, "Has anyone you considered general quadrilaterals rather than just parallelograms for this question? <u>https://www.desmos.com/calculator/brdjc07pfq</u>"

Question 5-6: Comment Robert Morewood said, "Nice application of the Pigeonhole Principle! Elementary ideas, but challenging to implement."

Statistics / Contest #5 Prob #, % Correct (all reported scores)				
5-1	82%	5-4	62%	
5-2	41%	5-5	21%	
5-3	44%	5-6	15%	