Math League

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

■ **Our Internet Score Center** All students who take the paper and pencil version of our contests and whose scores you report must have been tested at exactly the same time. Don't list students from any later class period. Instructions for submitting scores appear on each contest envelope. Scores you enter may be reviewed at any time by returning to the Internet Score Center. About 3 weeks after a contest, scores appear on our Web site, *www.mathleague.com.* Late scores must be accompanied by a brief explanation of the reason for lateness. Scores you enter may be reviewed at any time by returning to the Internet Score Center. About 3 weeks after a contest, scores appear on our Web site, *www.mathleague.com.* Late scores must be accompanied by a brief explanation of the reason for lateness.

■ **Contest Dates** Future HS contest dates (and alternates), all Tuesdays, are November 9 (Nov. 16), December 7 (Dec. 14), January 11 (Jan. 18), February 8 (Feb. 15), and March 15 (Mar. 22). Please note that each alternate date is on the Tuesday following the official date. As noted earlier in this newsletter, **while these dates are the official contest dates, under the unusual circumstances this year presents contests may be administered on any one *or more* days during the weeks of the official and alternate dates**. If your scores are late, meaning beyond the week of an alternate date listed above, please submit a brief explanation. We reserve the right to refuse late scores lacking an explanation. We sponsor an *Algebra Course I Contest* in April, as well as contests for grades 4, 5, 6, 7, & 8. See *www.mathleague.com* for information.

■ **Administer This Year's Contests Online** Any school that is registered for any of our contests for the 2021-2022 school year may register at http://online.mathleague.com for the 2021-2022 Online Contests at no cost. In addition to possible facilitation of social distancing during the Covid-19 pandemic, 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.

■ **Eligibility Rules** Only students officially registered as students at your school may participate. That's our rule.

■ **Authentication of Scores** To give credibility to our results, we authenticate scores high enough to win recognition. Awards indicate compliance with our rules. Please print the Selected Math League Rules (posted on the same page as this Newsletter) and have students read them and then sign them to confirm knowledge of the rules. *Keep* the signed sheets. Do *not* send them to us unless we request authentication from you.

■ .**Past Contests Online** Teachers of any school registered for any of our 2021-2022 contests can now purchase online versions of the past contests for any selected grade (4th Grade through High School) for $9.95 per grade level for use throughout this school year at http://online.mathleague.com . For this fee, all students in your school can take all the past contests for a specific grade online. We grade each contest for you, provide you with answers and solutions, and keep statistics on each student's performance.

■ **We Are on Facebook!** Like us at

■ **Send Your Comments** to comments@mathleague.com.

■ **General Comments About the Contest** Yanli Cui said, "Thank you for organizing the contest! We had about 30 students take the exam today after school." Robert Morewood said, "Thank-you for another set of stimulating questions!" Maureen Chase said, "Thanks for a great first contest." Ron Knapper said, "Thank you for this online contest option. Makes my life much easier than having to find funding, transportation, etc., etc. Now to get the numbers up. Have a lot of students coming to math enrichment, but way too few are willing to try the competition." Richard Newcomb said, "Thanks as always for running the contest. Numbers 5 and 6 were very nice." Sarah Rupright said, "We took the option of taking the test a week late because we were on Fall break on Oct 12." Please note that taking that test on the alternate date is always acceptable, and no prior authorization from or notice to Math League is ever required!

■ **Question 1-3: Comment and Appeal (Accepted)** Maureen Chase said, "One problem that caught a lot of students here was #3 because they were still thinking it was asking for integers, so most everyone who got it wrong answered -1,0." Benjamin Dillon appealed on behalf of a student, asking "Should credit be granted for (-2, 1)? It is clear to me that the student is using interval notation to express their answer." In this case, credit can be given because the student's intent is clear and there is no other overriding reasonable interpretation of the submitted answer.

■ **Question 1-5: Comments** Robert Morewood said, "INCLUDING zero in #5 made a nice follow-up challenge." One advisor submitted a comment expressing concern that the solution might be counting as prime such inappropriate numbers as 1 or 40, though the advisor did acknowledging that "I didn't have time to read the directions/solutions through." We hope that the language of the solution is clear that 1 is being considered not as a stand-alone number, but as a digit that could be part of a 2-digit prime such as 61 (in the example given). Similarly, 40 is being considered not as one of the numbers in a list of acceptable prime numbers, but rather as a partial value that would be part of the value of an acceptable prime on a list, such as 47 (in the example given).

Statistics / Contest #1
Prob #, % Correct (*all reported scores*)

Prob #	% Correct	Prob #	% Correct
1-1	88%	1-4	27%
1-2	49%	1-5	19%
1-3	48%	1-6	8%