1/07

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.

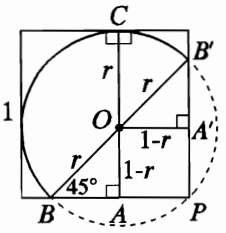
■ **Send Your Comments** to comments@mathleague.com and view results at www.mathleague.com before they arrive in the mail.

■ **Upcoming Contest Dates & Rescheduling Contests** Contest (and alternate) dates, all Tues., are Feb. 6 (Jan. 30), Mar. 6 (Feb. 27), Apr. 10 (3). If **vacations, school closings, or special testing days**) interfere, please reschedule the contest. Attach a brief explanation, or scores may be considered unofficial. We sponsor an *Algebra Course I Contest* and contests for grades 4, 5, 6, 7, and 8. Get information and samples contests at *www.mathleague.com*.

■ **2007-2008 Contest Dates** The good news is that our Internet Score Report Center allows us to move contest dates forward. We can now schedule the 6 contests to avoid AMC conflicts, to be held 4 weeks apart (mostly), and to end in March, as many have requested, not April. Next year's contest (and alternate) dates, all Tuesdays, are: Oct. 23 (16), Nov. 20 (13), Dec. 18 (11), Jan. 15 (8), Feb. 12 (5), Mar. 18 (11). If you have a conflict or scheduled regional testing, put an alternate date on your calendar now!

■ **T-Shirts Anyone?** We're often asked "Are T-shirts available? The logo lets us know fellow competitors." Featuring grey shirting and a small, dark blue logo in the "alligator region," we have MATH T-shirts in all sizes at a **very** low price. There's one low shipping charge per order, regardless of order size. You may use Amex, VISA, MasterCard, or Discover. To order, use our Web site, www.mathleague.com or you may phone your order to 1-201-568-6328; or fax your purchase order to 1-201-816-0125.

■ **Comment About #2-6** Dick Gibbs said that the two small right triangles each have a leg of length $1-r$. Since these right triangles also have $\cong$ hypotenuses, these two triangles are $\cong$, so $AB = A'B'$. Since $PAOA'$ is a square, $AP = A'P$. Thus, $BP = B'P$ and $\triangle BPB'$ is isosceles.



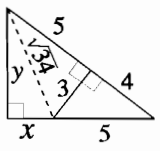
■ **The Internet Score Report Center** Since this is the first year of our new Score Report Center, we welcome comments and suggestions for improvement. This is a work in progress, and we try to correct any problems advisors experience as quickly as *humanly* possible. (Our dog is Web master, so leave doggie treats). Jon Mormino wrote "This site is great. It couldn't be any easier to enter scores. Thanks." Barbara Livingston said "Thanks for keeping the scoring form open longer. This is a great format, especially the ability to enter all scores and keep a record of cumulative scores. Thanks for the changes!" Dean Johnson said "I love the new scoring center! Love it Man! Great job!" Jon Graetz asked "Is there a plan to be able to click to view a summary of a school's cumulative leaders or an alphabetized display of student progress?" *This is in the works. Our programmer promised us this capability last month. Any day now . . . .* Elizabeth Korte said "The Web site is so easy to use now."

■ **General Comments About Contest #3:** Denny Cook said "my kids said this was the hardest one of the year, yet we had the best score we've had in several years." Keith Calkins said it was "challenging for most students." James Conless said "Well designed contest. Challenging but manageable in 30 minutes." Ginny Magid thought "this was a great contest with something for everyone." Susan Cantey "thought this one was much easier" and "liked the fact that my students found several different ways of doing the last 3 problems." Barbara Holzer said "Great contest! I especially like the questions that have a variety of solutions." Art Kalish said "As you can see from our scores, there was not enough challenge on this problem set." Jack Siderer said "this was the best test so far." Nicholas Holmes said his school had its first 6 and the Math Club president had her first 5. Lenora Murray said "Great contest, as always." Ken Corbett's students "enjoyed this contest best." Josh Turner, Stephen Mazza, Adele Fielding, Lee Speers, Gail Ellenbaum and Lynette Quigley said "more students got 3-5 right than 3-1 or 3-2." Renetta Deremer said "The enthusiasm of our mathletes is lively and spirited." Jon Creamer had many more kids turn out because he served pizza!

■ **Problem 3-1: Appeals (Denied)** Two appeals for $(a,b,c) = (1,1,4)$ were denied. These are *not* unequal. Replacement of the word "unequal" with "different" does not alter the meaning. Appeals such as this need to be supported by an authoritative reference, such as an unabridged dictionary (which we do use).

■ **Problem 3-2: Alt Sol & Calculator Use** Barbara Pheanis entered the left side as y_1 and the right side as y_2 and tbl start 33. The table accepted the factorial sign and it was easy from there. Dr. Peter Simon submitted an alternate solution using factoring.

■ **Problem 3-4: Alternate Solutions** Daniel Luchay and Jack Josey sent in the diagram, shown at the right. Daniel used the Pythagorean Theorem twice. Jack used trig. to get $x = 2.2$ and $y = 5.4$. Daniel Mattoon used the Law of Sines repeatedly. Virginia Hayes thought the 5 on the bottom was poorly placed.



■ **Problem 3-6: Calculator Sols** Patricia Giordano, Jack Josey, & Daniel Luchay graphed the function to estimate the roots. Richard Leavitt cleverly rearranged factors and multiplied.

Statistics / Contest #3

Prob #, % Correct (all reported scores)

3-1	60%	3-4	46%
3-2	59%	3-5	75%
3-3	55%	3-6	36%