

Dear Educator,

We would like to take this opportunity to invite your school to participate in the 2011/2012 contest season as members of the Atlantic-Pacific Mathematics League community. The Atlantic-Pacific Mathematics League was founded over 30 years ago and offers your school another fantastic opportunity to *challenge* your students and to encourage mathematical *discussion* in your classrooms.

The Atlantic-Pacific Mathematics contest is a series of **six contests** given monthly from November to April in three divisions, *elementary school* (grades 5 and 6), *middle school/junior high* (up to grade 9), and *high school* (up to grade 12). Each division involves **six challenging, non-calculator questions** to be completed within 30 minutes. The elementary school content areas include topics through Pre-Algebra. The middle school content areas include Pre-Algebra, Algebra, and Geometry. The high school content areas include Algebra, Geometry, Algebra II, and Trigonometry.

Atlantic-Pacific contests do not have to be limited to mathematics teams or clubs, but can offer a fantastic opportunity for *challenge* and *discussion* among your entire student body. Teams submit their top ten individual scores online as their team score and are compared to other teams in their region. *Awards* and *recognition* are given at the end of the contest season to the highest scoring teams in each region and individuals at the elementary, middle school, and high school divisions.

Please explore our website at www.atpacmath.com or contact us at coordinator@atpacmath.com with further questions. We have enclosed information on contest dates, receiving contests, and submitting scores. In addition, we have enclosed a **registration form**. You may send your registration information to us at coordinator@atpacmath.com. The first contest is scheduled for November 16, 2011. **To ensure prompt arrival of your contests, please submit your registration information by September 2011. This will ensure that you receive all contest materials for the 2011/2012 Atlantic-Pacific Contest season in October.**

In conclusion, we know that you and the students of your school will find the Atlantic-Pacific contests both *challenging* and *rewarding* for your mathematics program. Please join us for a stimulating year as new members of the Atlantic-Pacific Mathematics League.

Sincerely,

Atlantic-Pacific Math League
coordinator@atpacmath.com

2011/2012 Contest Dates and Team Score Submission

Contest #	Contest Date	Submit Results by
1	Wednesday, November 16	Tuesday, December 13
2	Wednesday, December 14	Tuesday, January 10
3	Wednesday, January 11	Tuesday, February 7
4	Wednesday, February 8	Tuesday, March 13
5	Wednesday, March 14	Tuesday, April 10
6	Wednesday, April 11	Sunday, April 22

If you have a conflict with the posted contest dates, please give the contest as close to the given dates as possible.

Receiving Contests and Contest Topics

All contests and answer keys will be sent, in Adobe Acrobat (.pdf) format, via the sponsor's registered e-mail in October. You may make as many copies as you need for each contest, but it is essential that there is no discussion about specific contest questions and that all contests and answer keys are secured prior to the contest date.

All contest level topics can be found in September/October 2011 on the website at www.atpacmath.com.

2011/2012 Atlantic-Pacific Math League - Registration Form

To ensure prompt arrival of your contests, please complete all registration information below and submit by **September 30, 2011**. All contests, keys, and results will be sent via e-mail, so be sure to include your current e-mail address. In addition, be sure to check the appropriate contest level(s). You may send your registration information to us at coordinator@atpacmath.com or through the mail. The first contest is scheduled for Wednesday, November 16, 2011. We will e-mail all six contests and answer keys to your registered e-mail address in October.

Registration Information

Sponsor's Name: _____
School Name: _____
School Address: _____

Phone: _____

(Contests sent to these e-mail addresses)

Sponsor's E-mail: _____
Alternate(home/co-sponsor) E-mail: _____

<u>Contest Level</u> (check all that apply):	<u>Cost</u>	<u>Total</u>
_____ Elementary School (Grade 5 and 6)	\$80 (US) or \$85 (Canada)	
_____ Middle School/Junior High (up to Grade 9)	\$80 (US) or \$85 (Canada)	
_____ Senior High (up to Grade 12)	\$80 (US) or \$85 (Canada)	
<u>Past Season Contests and Keys</u> (circle all that apply):		
High School: (10/11) (09/10) (08/09) (07/08) (06/07)	\$10 per HS season	
Middle/Junior: (10/11) (09/10) (08/09) (07/08) (06/07)	\$10 per MS season	
Elementary: (10/11) (09/10) (08/09) (07/08)	\$10 per ES season	
Grand Total:		

Please make checks payable to **Atlantic-Pacific Contest** and send to:

Atlantic-Pacific League Coordinator
 P.O. Box 523
 Glenside, PA 19038
 USA

ATLANTIC-PACIFIC MATHEMATICS LEAGUE

Elementary School League

No Calculators Permitted

Name _____

Grade Level _____

Score _____

Time 30 Minutes

Math Teacher _____

Answer Column

1.1

Subtract $8\frac{1}{3}$ from $10\frac{1}{6}$. Express your answer as a mixed number in simplest form.

1.2

Determine the greatest common factor of 24 and 60.

1.3

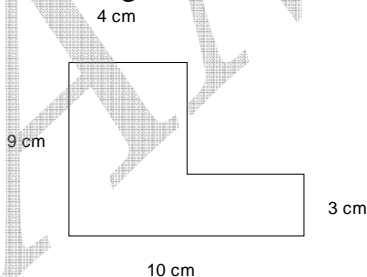
Write the number 126,000,000 in scientific notation.

1.4

The length of a mini-flashlight is 13 cm. What is this length in millimeters?

1.5

What is the perimeter of the figure shown? All angles are right angles.



1.6

Which figure has an odd number of vertices?

A. Square

B. Hexagon

C. Pentagon

D. Octagon

ATLANTIC-PACIFIC MATHEMATICS LEAGUE
Middle School/Junior High School League
No Calculators Permitted

Name _____

Grade Level _____

Score _____

Time 30 Minutes

Math Teacher _____

Answer Column

1.1 The sum of two numbers is 10; their product is 20. Find the sum of their reciprocals.	
1.2 16% of 35 is 4% of what number?	
1.3 The perimeter of a square is 64. What is the area of this square?	
1.4 Solve for B if $\frac{1}{A} + \frac{1}{B} = \frac{1}{C}$.	
1.5 Factor as far as possible in the domain of integers. $A^2B + AB^2 + A^2 - B^2 - (A + B)$	
1.6 If $\frac{2}{3}$ of the faculty of Madison High School are women and $\frac{1}{2}$ of the male members are married while 5 others are bachelors, how many teachers are on the faculty of this school?	

ATLANTIC-PACIFIC MATHEMATICS LEAGUE

High School League No Calculators Permitted

Name _____

Grade Level _____

Score _____

Time 30 Minutes

Math Teacher _____

Answer Column

1.1	From a group of males and females, 15 females leave. There are now twice as many males as females. Later 45 males leave. Now there are 5 females for each male. What was the original number of females?	
1.2	Let N be the number of integers between 35,000 and 45,000 that are squares of integers. Find N .	
1.3	If $S = \frac{W_1 - W_2}{W_3 - W_2}$, solve for W_2 .	
1.4	Change $(10110)_2$ to a base ten numeral.	
1.5	The area of an isosceles right triangle is 8. Find its perimeter.	
1.6	Simplify $36^{\sqrt{5}} \div 6^{\sqrt{20}}$.	