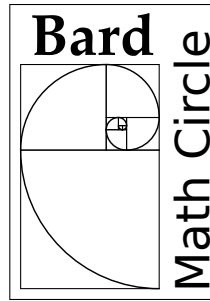


Problems

This month we'll revisit problems from this year's AMC 8 contest. We have extra exam booklets if you didn't bring your own. The table below shows the percentage of the 48 students who took the exam who correctly answered each problem. We'll be sharing solutions with each other throughout today's circle.



December 2012

bardmathcircle@gmail.com

bardmathcircle.blogspot.com

1	2	3	4	5
83%	60%	90%	67%	77%

6	7	8	9	10
38%	42%	23%	50%	38%

11	12	13	14	15
38%	21%	54%	52%	10%

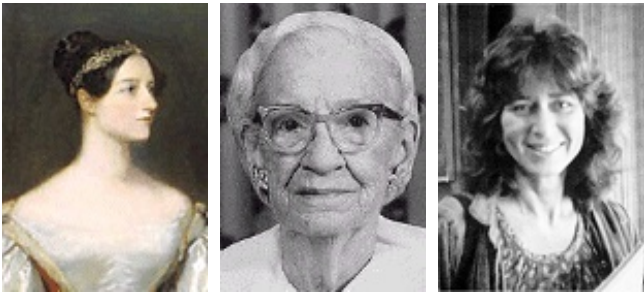
16	17	18	19	20
31%	23%	23%	17%	33%

21	22	23	24	25
33%	17%	23%	25%	15%

Student Corner

Five adults come across a river one day. They see two kids playing in a raft in the middle of the river. All five adults want to cross the river. The raft can only hold either 2 children or 1 adult. The raft cannot cross the river without someone in it paddling. How do you get everyone across? (Communicated to the math circle, via Katie.)

December Math History



Ada Byron, Lady Lovelace

December 10, 1815 – November 27, 1852.
Early computer scientist. She predicted that computing machines might be used to compose complex music, to produce graphics, and would be used for both practical and scientific use. She was correct, and anticipated by more than a century most of what we think is brand-new computing.

www.agnesscott.edu/lriddle/women/love.htm

Grace Murray Hopper

December 9, 1906 – January 1, 1992.
Earned her Ph.D. in Mathematics from Yale University in 1934. Coined the term “computer bug”. Invented the first computer programming language, COBOL, in 1959.

www.agnesscott.edu/lriddle/women/hopper.htm

Lenore Blum

December 18, 1942 –
Earned her Ph.D. in Mathematics from MIT in 1968. A charter member of the Association for Women in Mathematics, her research was in Algebra and Model Theory. Now a Computer Science professor at Carnegie Mellon University.

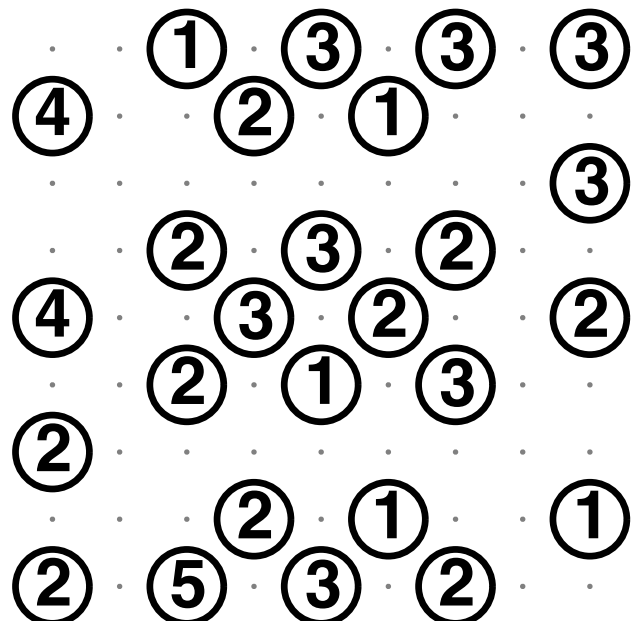
www.agnesscott.edu/lriddle/women/blum.htm

Puzzles

KenKen: Place the numbers 1, 2, 3, and 4 in the grid below, so that each appears once in each row and column. The numbers in each cage, when combined with the operation given, must result in the target number shown. lavoze.bard.edu

7+	11+		
			4
	10+	3	5+

Bridges: Connect islands with single and double bridges. All bridges must be vertical or horizontal, and the numbers indicate exactly how many bridges leave the island. Bridges may not cross. krazydad.com



Answers (Not the same as solutions!)

Problems

You can find the AMC 8 answers here:

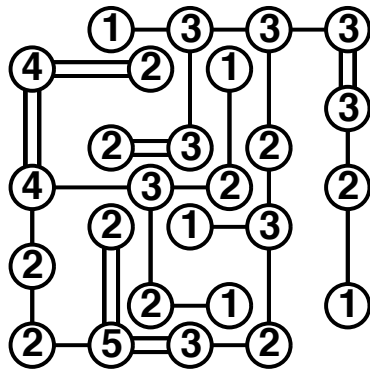
amc.maa.org/amc8/2012/2012_AMC8_Answers.pdf

and solutions here:

www.artofproblemsolving.com

[/Wiki/index.php/2012_AMC_8](http://www.artofproblemsolving.com/wiki/index.php/2012_AMC_8)

⁷⁺ 1	¹¹⁺ 3	4	2
3	1	2	⁴ 4
2	¹⁰⁺ 4	³ 3	⁵⁺ 1
4	2	1	3



Upcoming Events

Tivoli: Friday, December 7th

Kingston: Saturday, December 8th

(No circles in January)

Info: bardmathcircle.blogspot.com.

Answers (Not the same as solutions!)

Problems

You can find the AMC 8 answers here:

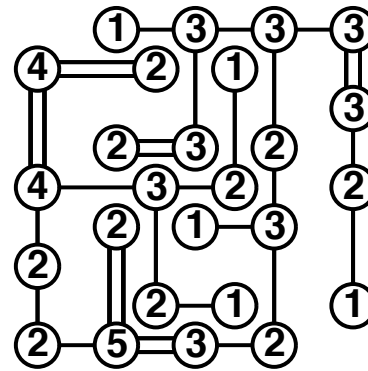
amc.maa.org/amc8/2012/2012_AMC8_Answers.pdf

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