



Math On Quarterly



Math On is an annual math competition for junior high students. Created by math teachers Irene Angelopoulos and Brenda Vaughan it focuses on engaging gifted math students by challenging them to compete against each other solving word problems. It is currently in its fourth year and is growing rapidly.

No matter how correct a mathematical theorem may appear to be,

Historical Math Tidbit

Isaac Newton and Gottfried Leibniz, two prominent 17th century mathematicians, both independently invented calculus at the same time. While today both men are given credit for the discovery, at the time a heated rivalry took place. It was a different world then with national pride a significant consideration. Mathematicians from mainland Europe supported Leibniz and mathematicians from England were strongly behind Newton, each side accusing the other of stealing the ideas from the other man. It became so bad that England refused to teach anything but Newtonian calculus for many decades and fell behind the rest of Europe in mathematical discoveries.

Today it is generally conceded that Newton discovered calculus first but that Leibniz developed a better system for using it.

one ought never to be satisfied that there was not something imperfect about it until it also

Is your school interested in participating in the Math On Olympiad?

Have your school math leader contact Irene Angelopoulos (angeloi@staff.ednet.ns.ca) or Brenda Vaughan (vaughanb@staff.ednet.ns.ca) for more information.

Mathematician of Note

Archimedes was a Greek mathematician who lived 2200 years ago. He is considered one of the greatest mathematicians of all time. Among his accomplishments are an approximation to π that was the most accurate of its time, the Archimedes Screw, the Method of Exhaustion and innumerable engineering feats often used as weapons or methods of defense.

He was a bit absent minded and according to popular legend, upon solving a particularly tricky problem for the king, he leapt naked from his bath and ran down the street (still naked) shouting "Eureka" which is Greek for "I've solved it."

Archimedes died when a Roman soldier stabbed him with a spear (Archimedes being so intent on solving a math problem that he didn't even notice that a soldier was there).

Days to Remember:

April 21st—zone competitions
May 9th—regional competition

gives the impression of being beautiful. - George Boole, 1815-1869

Hey You!

Are you a good artist? Do you like cartooning? If you want to see your "math cartoon" in print then submit it to harviedj@staff.ednet.ns.ca

Math Quiz

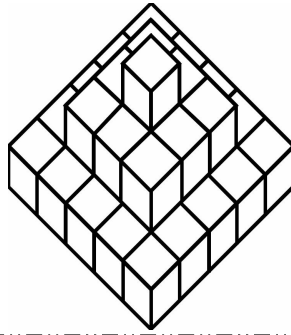
- 1) How many eggs can you put in an empty basket?
- 2) What number does "Giga" stand for?
- 3) What number system has only two digits?
- 4) What is the equation for the area of a circle?
- 5) What do 13, 97 and 1103 have in common?

I



PROBLEM SOLVING

The figure shown consists of 3 layers of cubes with no gaps. Suppose the complete exterior of the figure, including the bottom, is painted red and then separated into individual cubes.



HOW MANY CUBES WILL HAVE EXACTLY 3 RED FACES?

Number of the Quarter

Zero (0) → zero might seem like a dull number but it's actually quite fascinating. Unlike other whole numbers, you can't see zero. You don't look out the window and see zero trees...you just don't see trees. Because of this peculiarity it wasn't invented until significantly after the other whole numbers. It serves as a place holder; it's an even number; it's the only number you can't divide by and the first number that we learn that takes us into "math land".

2009 Participating Schools

Astral Drive (host)
 Caledonia
 Ellenvale
 Eric Graves
 Graham Creighton
 Sir Robert Borden
 Gorsebrook (host)
 Bicentennial
 Brookside
 Eastern Passage
 Highland Park
 Prince Arthur
 Oxford (host)
 Cavalier
 Cornwallis
 Harold T Bennett
 Ridgecliff
 St Agnes
 Leslie Thomas (host)
 Bedford JH
 Bedford South
 Gaetz Brook
 Musquodoboit
 Sackville Heights
 Sydney Mines
 TL Sullivan
 Malcolm Munroe
 Sherwood Park Education Centre
 Saint Michael
 Morrison
 Breton Education Centre
 Whitney Pier

*Do not worry about your difficulties in mathematics, I assure you that mine are greater.
 - Albert Einstein, 1879-1955*

6		4	1		
5	2	8			6
		6			2
4	1	2	7		
2		5			6
		3	8	1	4
9			3		
	8		1	3	2
		1	5		4

2008 Winners

Overall: Prince Arthur JH
Engineering Challenge: Cornwallis JH
Grade 9: Veronica Hong & Tim Kim (Bedford South)
Grade 8: Ellis Yuan-Rapati & Wesley Fisher (Prince Arthur)
Grade 7: Oliver Falvey & Sofia Myers (Cornwallis)

Quiz Answers

- 1) Only one → after that the basket is not empty.
- 2) A billion (a Gigabyte is a billion bytes)
- 3) Binary (computers are all based on binary)
- 4) $A = \pi r^2$
- 5) They're all prime numbers.

Psssst.....

Wanna design our logo? Send ideas to:
 sbarnab@staff.ednet.ns.ca