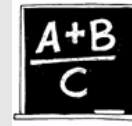


Math Links



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Inside Edition

π **Celebrate Pi Day --
Resources and Activities**

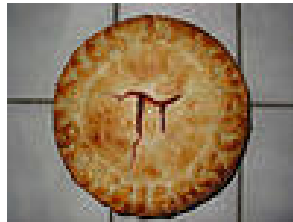
PROFESSIONAL ORGANIZATIONS

**National Council of Teachers of
Mathematics**
(NCTM)
<http://www.nctm.org/>

**Missouri Council of Teachers of
Mathematics**
(MCTM)
<http://www.moctm.org>

**Math Educators of
Greater of St. Louis**
(MEGSL)
<http://www.mobot.org/education/megsl>

Celebrate Pi Day!



Mmmm. Pi Day! The nerdy holiday celebrated by math geeks worldwide. This is the day we gather around to celebrate that amazing little (long) number, pi. March 14 will be here sooner than we realize. Now is the time to begin making those plans for celebrating this day with your students and colleagues. To help with your search for

activities and information, check out the resources listed on our website.
<http://www.stlceo.org>

March 13 – 16, the St. Louis Science Center will be hosting its annual Pi Celebration. Activities for all age groups are being planned during the four-day celebration, making this a terrific field trip for your students. Not only do children of all ages have the opportunity to have fun with the mathematics activities associated with Pi, but they can also participate in mathematics activities that are part of the Science center every day. Among the activities planned for this year: making a pi bracelet, estimation and measuring activity, Pi Scavenger Hunt, measuring pizza pies and Pizza Pie Poll. Check out the St. Louis Science center's web site, <http://www.slsc.org>, to find the information you need to plan a field trip.

Pi Day in Second Life? Why of course. Create your own avator on the Second Life web site and then transport to San Francisco's Exploratorium to experience Pi Day in the virtual world.
<http://slurl.com/secondlife/Exploratorium/73/173/30>

And now for more ideas.

- π **Make a Student Pi** circling your school by having each student hold a digit of pi.
- π **Make a Pi Chain** out of construction paper by assigning colors to each digit of pi. You could also make a Pi Bracelet with colored beads by assigning colors to each digit of pi.
- π **Wearing Pi, or where do hat sizes come from?** Use a tape measurement to measure the circumference students heads. Think about where a hat sits on a head. (An adult's head usually ranges between 21 and 25 inches.) Dividing the head's circumference by pi results in the hat size.
- π **Find your birthday in Pi.** Visit <http://www.facade.com/legacy/amiinpi/>

CONFERENCES

Equity: All Means All NCTM Annual Meeting

Washington, D.C.
April 22-25, 2009

NCTM Regional Conferences

Minneapolis: November 4-6, 2009
Nashville: November 18-20, 2009

Summer Opportunity

Mathematicians in Residence (MIR) is a unique learning opportunity to improve student achievement in mathematics.

The Mathematicians in Residence (MIR) program is now accepting additional teachers to participate in the next two years of a partnership between the St. Louis Public School District, the Parkway School District, and Maryville University. The MIR program begins with the MIR Academy scheduled for the summer of 2009.

Who is eligible? Teachers teaching in Grades 6 – 8 in Archdiocesan schools in St. Louis City or in the Parkway School District.

When: June 15, 2009 through July 2, 2009; 8:00 a.m. to 3:00 p.m.

Daily stipend: \$100/day for the 12-day Academy.

For more information contact:

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π Celebrate the birthdays of Albert Einstein and Waclaw Sierpinski.
<http://www-groups.dcs.st-and.ac.uk/~history/Mathematicians/Sierpinski.html>

π Read a Pi Book to your students.

Students will enjoy “Sir Cumference and the First Round Table” by Cindy Neuschwander, Charlesbridge Publications. Also by the same author, “Sir Cumference and the Dragon of Pi” and “Sir Cumference and the Knight of Angleland”. Create a play based on these stories.

π Write a Pi-Ku.

A haiku that is. These poems are composed of 5 syllables, then 7 syllables and then another 5 syllables.

Pi – ratio
Around: across a circle –
An endless number?
A circumference
Divide by diameter
Irrational pi.

...or a Pi Limerick

“Tis a favorite project of mine
A new value of pi to assign.
I would fix it at 3
For it’s simpler, you see,
Than 3 point 1 4 1 5 9.

<http://www.markcarter.me.uk/math.html>

Now there is an ancient Greek letter,
And I think no other is better.
It isn’t too tall,
I might look very small,
But its digits, they go on forever.

<http://www.kathimitchell.com/piceleb.html>



π Lose Yourself in the Digits (Pi Day Song) Based on Eminem's "Lose Yourself" and provided by *teachpi.org* (<http://www.teachpi.org>) recorded by "Pi Diddy", this is a video was made by a 7th grade math teacher for students in Louisville, Kentucky. <http://www.squidoo.com/PiDay>

π Wear a Pi T-shirt or a Pi Tie. Discounts available for groups. Visit http://www.scienceteacher.com/math_shirt.htm. or call 877-286-6212.

π Tell a few Pi jokes.

What do you get when you take the sun and divide its circumference by its diameter? Answer: Pi in the sky.

What do you get if you divide the circumference of a bowl of ice cream by its diameter? Answer: Pi a'la mode.

More jokes can be found at
<http://www.doe.virginia.gov/Div/Winchester/jhhs/math/humor/pijokes.html>

π Are these random digits? Middle school teacher, Pat Kennedy, posed the question to her classes. She distributed a print out of the first 1,000 digits of pi. Drawing her students into the project, her students decided to make a frequency table, a bar graph, and a circle graph. Students were asked to identify patterns if any were seen.

π **Anyone for a game of Trivia?** Try the Pi Trivia Game.

Team up students and encourage them to study the history of pi. Best score wins. There is a fine interactive website that quizzes students in a multiple choice format and provides results with the correct answers. This game site randomizes the questions upon replaying The Pi Trivia Game. Better still, have students create their own set of questions. You might even wish to create a Pi Day Jeopardy Game. This game can be found at <http://eveander.com/trivia/>



π Teacher Resources π

Here are four resource books that contain all sorts of activities and information to help in the planning of Pi Day. All four are available at Barnes and Noble and on Amazon.com.

The Joy of Pi by David Blatner. This book is a treasure trove of facts, folklore, quotes, uses, puzzles, and even the first 1million digits of pi. The rich history of this ratio is never boring, as anecdotes and weird trivia pop up throughout. (ISBN 0-8027-7562-4)

The Piece of Pi by Naila Bokhari. This book contains activities ready for classroom use. (ISBN-13: 9781593631208)

Pi: A Biography of the World's Most Mysterious Number by Alfred S Posamentier and Ingmar Lehmann. The authors examine how pi has been an object of fascination from the Old Testament, through the act proposed in Indiana in 1897 setting its value, to a recent experiment with a supercomputer that netted a total of 1.24 trillion numbers to th4 right of the decimal point. (ISBN-13:9781591022008)

A History of Pi by Petr Beckmann. This history of Pi, (i.e. the history of math), is a mirror of the history of Man, from the first Stone Age tally stick to the latest 'intelligent' computers...with all the thinkers, builders, navigators, martyrs and madmen along the way. (ISBN-13: 9780312381851)

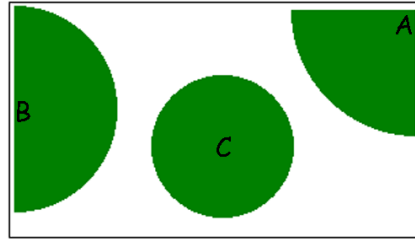


Problem to Ponder

Lily decided to plant orchids, her favorite flower, as borders for the three garden sections in her back yard. Section A is a quarter circle and has a sprinkler placed in the corner. Section B is a semicircle with a sprinkler placed in the center of the straight side. Section C is a full circle with a sprinkler directly in the center.

While she was calculating how many orchid plants she'd need to purchase, Lily noticed something curious. Each of the garden borders covered the same distance as the other two.

The picture below shows the general placement of sections in Lily's garden.



Note: this figure is not drawn to scale

Lily knows that the sprinkler in garden section C has a reach of exactly 2 meters. If each of the sprinklers just reaches its border with its spray, what are the reaches of the semicircular and quarter-circular sprinklers?

Being an inquisitive person who likes math problems, Lily started to wonder. While this wasn't the case in her gardens, what would the reaches of sprinklers A and B have to be in order to cover the same area as sprinkler C?

Thought to Ponder

“Probably no symbol in mathematics has evolved as much mystery, romanticism, misconception and human interest as the number pi.”

Source: William L. Schaaf: *Nature and History of Pi*.

π

Have a great Pi Day. Remember Pi Day is a day to celebrate mathematics in your school. It gives us the perfect springboard to allow our students to have fun while investigating mathematics concepts, being creative and even a little silly.

Peg Woodworth