

Search

How do I find it?

Subscribe to paper



Home News Travel Money Sports Life Tech Weather

Technology » Science & Space Shop for Gadgets

# Rare square dates pair in 2009

Updated 4/1/2009 12:20 PM | Comment | Recommend

E-mail | Print | Reprints & Permissions | **RSS**



**Science Snapshot**  
Dan Vergano

By Dan Vergano, USA TODAY

Share

Add to Mixx

Facebook

Twitter

More

April Fools' Day this year brings a math puzzle that's no joke. The trick won't save the world like actor Nicholas Cage's numerological riddle in the currently popular apocalypse flick, *Knowing*, but at least this one makes sense.

"I like to play with numbers and dates, and I'm always looking for math puzzles," says electrical engineer **Aziz Inan** of the University of Portland (Ore.) Inan regularly cooks up **math quizzes** for a historical newsletter, the *Franklin Gazette*, devoted to statesman-scientist **Benjamin Franklin**. And that led him to ponder some dates this year.

**March 3, 2009** brought us "**Square Root Day**," (3/3/9 is 3\*3=9, get it? 3 is the square root of 9) but Inan also looked at dates another way. Only some numbers, like 9 or 16 (4\*4=16), have whole numbers as square roots, as you may recall from your junior-high math class. What if, Inan wondered, you wrote out all the digits in the date, and looked for such whole number square roots or "square dates"?

"I was a little surprised at what I learned," he says:

- April Fools' Day, April 1, 2009 is 04/01/2009, or 4012009, which has 2003 as a square root (2003 \* 2003 = 4012009.)
- March 5, 2009 is also "square date, and it is very rare to have more than one in a year (1747 \* 1747 = 3052009.)
- The next April Fools' square date doesn't fall until April 1, 6016 (2004\*2004 = 4016016.)

From the year 1000 until 9999, this century has the highest number of square dates, with a total of 24, Inan says. Of course, in parts of Europe, where dates are started with the day instead of the month, the "square dates" would be a little different.



Enlarge By Vince Valitutti, AP  
Nicolas Cage works a math problem in a scene from "Knowing."

"A nice little tidbit for April Fools' Day," says mathematician **Arthur Benjamin** of Harvey Mudd College in Claremont, Calif., co-author of *Secrets of Mental Math: The Magician's Guide to Lightning Calculation and Amazing Math Tricks*.

Mathematicians have fooled around with similar date tricks since at least 1864, when **Augustus De Morgan** of University College London, noted the "square year," pointing out that 1849, the year of his 43rd birthday, was the square of his age at the time (43 \* 43 = 1849.) De Morgan was a living, breathing, math puzzle, who described himself as "being x years old in the year x+2." If you are born in 1980, you can make the same claim in 2025, when you turn 45 (45 \* 45 = 2025.)

Also unlike the numerology riddle in *Knowing*, Inan doesn't see any secret meanings in numerical puzzles. "If you look at numbers, you start to see all sorts of patterns and that's always intriguing," he says. His own name, he notes, is a kind of geometric word puzzle, if written in all capital letters, AZIZ INAN. Swap the vowels and turn the consonants 90 degrees and the words have switched places. "My parents didn't plan this," he says. "It's just fun."

Mixx |

Posted 3/28/2009 10:00 PM

Updated 4/1/2009 12:20 PM

E-mail | Print | Reprints & Permissions | **RSS**

To report corrections and clarifications, contact Reader Editor **Brent Jones**. For publication consideration in the newspaper, send comments to letters@usatoday.com. Include name, phone number, city and state for verification. To view our corrections, go to corrections.usatoday.com.

**Guidelines:** You share in the USA TODAY community, so please keep your comments smart and civil. Don't attack other readers personally, and keep your language decent. Use the "Report Abuse" button to make a difference. [Read more.](#)

## Featured video



**Royal family**  
Can wedding boost monarchy's popularity?



**Charlie Sheen**  
Actor seeks custody of twins.

[More: Video](#)

## USA TODAY Tech E-mail Newsletters

Sign up to get:

- Product Reviews
- Science and Space
- Hot trends from industry experts and more



Sign Up Now

### Newspaper Home Delivery - Subscribe Today

Home • News • Travel • Money • Sports • Life • Tech • Weather

About USATODAY.com: Site Map | FAQ | Contact Us | Jobs with Us | Terms of Service  
Privacy Policy/Your California Privacy Right | Advertise | Press Room | Developer | Media Lounge | Reprints and Permissions

News Your Way: Mobile News | Email News | Add USATODAY.com RSS feeds | Twitter | Podcasts | Widgets

Partners: USA WEEKEND | Sports Weekly | Education | Space.com | Travel Tips

Copyright 2011 USA TODAY, a division of Gannett Co. Inc.