SEPTEMBER MEETING:
NEW MEXICANS FOR SCIENCE AND REASON will hear
Kevin Folta on
“Rounding Up Glyphosate Myths”
=>September 14th, 2022 7:00PM<=
=>Attend online!<=
=>RESUME LIVE MEETINGS?<=
Vote at roundorflat.com/covid19

FUTURE MEETINGS ANNOUNCED!
September 14th, 2022 NMSR Meeting:
Prof. Kevin Folta on “Rounding Up Glyphosate Myths”

Kevin Folta is a professor of horticultural sciences and molecular biology at the University of Florida, and is a Fellow of the Committee for Skeptical Inquiry. He will give an update on the controversies and myths surrounding the use of glyphosate for weed control.

7:00 PM September 14th, 2022, on Zoom!

VOTE ON LIVE MEETINGS!

Are we ready to resume live meetings? A Live Poll has been developed at roundorflat.com/covid19. Please go to this address, enter your name, and email (optional), and your preference from the following options:
- Let’s start meeting live, perhaps at Copper Canyon
- Cases Still Climbing, Let's Stay on Zoom for now
- Other (please add suggestion in box provided)

You can also send snail mail with your preferences, to David E. Thomas, NMSR, 1201 N. Avenida de Chamiso Pl., Socorro, NM 87801.

Current Tally: Live 2, Zoom 6

9/11 News: AE911Truth.org Fissions...

For years, Richard Gage led the group “Architects and Engineers for 9/11 Truth.” Dave Thomas debated him several times, including a 4-hour event on Coast to Coast AM. Last year, the board of AE911Truth broke with Gage, who has begun promoting COVID conspiracies along with 9/11 Truth claims. Gage has formed his own organization, and is busily promoting all sorts of additional conspiracy theories, including Covid 19, Ukraine, George Soros, and more.

Gage’s new site is loaded with conspiracy videos and appeals for donations. Here are some screenshots showing claims about COVID – and how it was planned in advance for nefarious purposes.

Find out more: AE911truth.org, RichardGage911.org
New Mexicans for Science & Reason (NMSR)  
NMSR is a non-profit group with the goals of promoting science, the scientific method, rational thinking, and critical examination of dubious or extraordinary claims. NMSR meets at 7 PM on the second Wednesday of each month, in Albuquerque, New Mexico, at a secure, undisclosed location. NMSR Reports is its official newsletter.

NMSR officers:
Dave Thomas, President  
1201 Avenida de Chamiso Pl., Socorro, NM 87801  
nmsrdave@swcp.com
John Covan, Vice-President  
jmcovan@juno.com
Debbie Thomas, Treasurer  
3205 Alcazar NE, Albuq., NM 87110  
abqdebbie@comcast.net
Eddy Jacobs, Resident Neutron Generator  
eddyjacobs88@gmail.com
Mark Fraser, CNM Sponsor  
ippon@earthlink.net
John Geohegan, Past President  
johngeohegan@gmail.com
Kim Johnson, Industrial Physicist  
kimber@comcast.net
Marilyn Savitt-Kring, Science Mom

Membership: $25/year (hardcopy newsletter), or $15/year (downloadable PDF), make your check payable to NMSR, send to treasurer (Debbie Thomas).

NMSR Advisors:
• Mark Boslough,  
  Adjunct Professor, University of New Mexico.
• Kendrick Frazier  
  Editor, Skeptical Inquirer
• John Geissman  
  Professor of Paleomagnetism
• Alan Hale  
  Southwest Institute for Space Research
• Randy Thornhill  
  Professor of Biology, UNM

Cyber–Cypher: SEPTEMBER PUZZLE
(Submitted by Dave Thomas)
The following letters are a simple substitution cypher. If R stands for L, R will stand for L everywhere. Your Cyber-Cypher Clue: Clue? Oh, well - if you must, see p. 2.


SUPER SECRET WORD!
However you prefer to do the cypher itself (above or below), simply duplicate those actions on the alphabetized row of cypher letters below. You’ll build an answer key, and you’ll also reveal - the Super Secret Word!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

August Cypher Solution
"YOU'VE GOT A WHOLE LOT OF PEOPLE SITTING ON THE SIDELINES BECAUSE, FRANKLY, THEY'RE FLUSH FOR THE MOMENT." - MITCH MCCONNELL, BLAMING JOB ISSUES ON COVID STIMULUS MONEY.

Esteemed August Code Crackers: Mike Arms* and Austin Moede*!
*Secret Word: "UNREALITY SHOCKS"

Socorro Stumper
Need more Secret Word Cryptograms?
New puzzles every week at www.nmsr.org/SocorroStumper.htm

September Bonus: “True, False, or Toggle”
Submitted by K. Sengupta

Andre, Bryce, and Cyrek know of a secret 2-digit number. It is known that one of them is a Truthsteller, who always tells the truth; one of them is a Liar, who always speaks falsely; and one is an Alternator, who alternates between true and false statements,
Each one of them makes precisely 3 statements regarding the number as follows:

ANDRE:
(1) One of the digits is 1.
(2) The sum of the digits is 8.
(3) Bryce's second statement is false.

BRYCE:
(1) One of the digits is 3.
(2) The difference of the digits is 4.
(3) Precisely one of Cyrek's statement is true.

CYREK:
(1) One of the digits is 6.
(2) Andre's first statement is false.
(3) The first digit is greater in magnitude.

The September Bonus: Determine the secret number from the above-mentioned clues. What are the types of the three men?

August Bonus Solution: “Pentagonal Ratios”
Submitted by Dave Thomas

Two large pentagons are shown, having the same area, labeled 1 at left. The pentagon at right has an inscribed pentagram (star), revealing a smaller, inverted pentagon, labeled 2.

The August Bonus: (A) What is the ratio of the perimeters of pentagons 1 and 2?
(B) What is the ratio of the areas of pentagons 1 and 2?

Answer: (A) 2.618 to 1, or $\phi^2$; (B) 6.854 to 1, or $\phi^4$, where $\phi = (1 + \sqrt{5})/2$ = the Golden Ratio.

Congrats to: Earl Dombroski (NM), Paul Braterman (UK), Mike Arms (NM), K. Sengupta (INDIA), Rocky S. Stone (NM), Gene Aronson (NM), Keith Gilbert (NM), Harold H. Gaines (KS)!

August 10th, 2022 NMSR Meeting:
Dave Thomas on “Non-Reversing Mirrors: Update”

I discussed my post-retirement plans for developing my non-reversing mirror inventions. I began with the age-old question, “Why does a mirror reverse right-and-left, but not up-and-down?”

The question is slightly misleading, as mirrors reverse right-and-left handedness, not necessarily directions. When you are looking into a vertically-upright mirror, it reverses neither left-and-right directions nor up-and-down directions. The only directions that are reversed are forward and backward, and this single inversion produces a reversed (handedness) image. The image of 3D glasses held up to a mirror shows that reversing forward-and-backward directions only results in a handedness-reversed image: the image of the blue (lighter) Right eye (R) belongs to the left eye of the imaged glasses.

I showed how a mirror in the horizontal plane (like a lake) reverses up and down directions, but not right/left nor forward/backward. Two flat mirrors at right angles produce non-reversed images, as shown.

A saddle-shaped mirror, on the other hand, turns waves inside out in one direction, like a concave mirror, and spreads them out in the other direction, like a convex mirror. The result is a tiny, non-reversed image.

If the saddle mirror is turned 90 degrees, the entire image rotates 180 degrees. Words do not appear “reversed” in this mirror.

Strange as saddle mirrors are, truly bizarre things happen with a version of the saddle with three hills and three valleys. This “monkey saddle,” if put on a horse, would have depressions for both of the monkey rider’s legs, and a third slot for their tail.
The images in the “three-lobed” (monkey saddle) mirror are non-reversed, like those of the saddle mirror, but there are two of them. It turns out that for every object in the field of view, the mirror produces two images on opposite ends of the mirror. If the viewer moves their hand in a circle while facing the mirror, they will see their two image bodies exchange hands, as shown.

It turns out that the nature of the images in the three-lobed mirror is described very well by a square-root conformal mapping procedure in the complex plane. That is, the three-lobed mirror takes your optical “square root.” A four-lobed mirror would produce three images (cube root), and a five-lobed mirror would produce four images. A viewer waving their hand in front of a five-lobed mirror would see each of their four images passing a hand to the right, much as in a bridge game.

A roly-poly surface called a “matrix mirror” has concave and convex regions, joined by saddle regions with alternating directions. This kind of mirror produces multiple images, where adjacent reversed and non-reversed images can appear from nothing, and disappear into each other, much like matter and anti-matter.

It turns out that any oddly-shaped mirror, with any number of smoothly-connected convex, concave, saddle, cylindrical, or flat surfaces, will create possibly changing numbers of reversed and non-reversed images. Remarkably, for each weird mirror, the number of reversed images minus the number of non-reversed images is a constant, the mirror’s “Magic Number.” The matrix mirror shown has a Magic Number of 1; there can be as many as 13 reversed images and 12 non-reversed ones. If the mirror is tilted, however, a dozen of the reversed images can wipe out their non-reversed partners, leaving only one reversed image.

I showed information from my patent and Scientific American article, and discussed plans for a new debunking YouTube channel to help market these mirrors. I showed some of the ideas in the works, such as sunrises disproving Flat Earth.

As usual, videos of this and past meetings are available at [http://www.nmsr.org/meetings.htm](http://www.nmsr.org/meetings.htm).

### September Skeptiverse Haiku!

**by Keith Thomas**

<table>
<thead>
<tr>
<th>Yellowstone tourists, We must hope,/Won’t mess with the Mighty jackalope!</th>
<th>Do you sense the need For scientific rigor Is getting bigger?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether UFO Or UAP/There’s much too Much credulity!</td>
<td>In a time of drought, Our dry skies still deliver Meteor showers.</td>
</tr>
<tr>
<td>The Grand Creator Is currently creating Grand new COVID strains.</td>
<td>As regards Asgard, Guards that served as Asgard’s guards Earned Asgard’s regards.</td>
</tr>
</tbody>
</table>

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DUES check the date on your mailing label. If it’s time for you to renew, or to make a contribution, please make your check payable to NMSR, and send it to Debbie Thomas, NMSR Treasurer, 3205 Alcazar NE, Albuquerque, NM 87110

Name _____

Address______________________

Membership $25 per annum (hard copy newsletter), or $15 per annum (online newsletter).

The NMSR e-mail list is fun! It’s an e-mail list with news announcements of interest to NMSR members, discussions about news of the times, and more. To join, send a request to nmsrdave@swcp.com.

Thanks to: John Covan, Eddy Jacobs, Debbie Thomas, Keith Thomas and all of our Puzzlers!