Ponder This

## **Ponder This**

## January 2013

<< December January February>>

## Ponder This Challenge:

The following six permutations of the letters EISH

**EISH** 

**HESI** 

**IEHS** 

HISE

SEHI

SIHE

satisfy that for every three letters, and every order, there exists a permutation in which these three letters appear in this order. For example, SHE appears in the last line and HIS appears in the fourth

Find 13 permutations of the letters ABCEFHIJLMNPQTVXYZ which satisfy the same condition: for every three letters and every one of their six possible orders, there exists at least one permutation in which the letters appear in this order.

A bonus question: What is special about this set of letters?

We will post the names of those who submit a correct, original solution! If you don't want your name posted then please include such a statement in your submission!

We invite visitors to our website to submit an elegant solution. Send your submission to the ponder@il.ibm.com.

If you have any problems you think we might enjoy, please send them in. All replies should be sent to: ponder@il.ibm.com

Challenge: 01/02/2013 @ 01:00 PM EST Solution: 02/01/2013 @ 01:00 PM EST List Updated: 01/02/2013 @ 01:00 PM EST

## People who answered correctly:

\*Mark Mammel (01/02/2013 05:22 PM EDT)

Deane Stewart (01/02/2013 07:01 PM EDT)

\*Tobias Philipp (01/03/2013 04:21 PM EDT)

Donald Dodson (01/03/2013 07:28 PM EDT)

Markus von Rimscha (01/03/2013 07:50 PM EDT)

Jason Lee, Brandon Leonhardt & Jacob Woolcutt (01/03/2013 11:53 PM EDT)

\*Johannes Waldmann (01/04/2013 09:15 AM EDT)

Joaquim Neves Carrapa (01/05/2013 09:58 AM EDT)

Deron Stewart (01/05/2013 06:44 PM EDT)

Alex Wagner (01/08/2013 02:48 PM EDT)

Alex Fleischer & Philippe Laborie (01/09/2013 03:47 AM EDT)

Peter Gerritson (01/09/2013 04:40 PM EDT)

Liubing Yu (01/10/2013 01:15 AM EDT)

Jamie Jorgensen (01/10/2013 04:55 AM EDT)

\*Martin Husar (01/11/2013 10:00 AM EDT)

Javier Rodriguez (01/11/2013 01:28 PM EDT)

Klaus Müller (01/11/2013 01:59 PM EDT)

Olivier Mercier (01/13/2013 05:16 PM EDT)

Sebastian Will (01/14/2013 10:28 AM EDT)

Peter Holdsworth (01/15/2013 12:40 PM EDT)

Lorenzo Gianferrari Pini (01/15/2013 02:23 PM EDT)

Todd Will (01/17/2013 12:48 PM EDT)

Florian Fischer (01/18/2013 06:20 PM EDT)

Sandeep Navada (01/21/2013 07:22 AM EDT)

\*Christian Pape (01/21/2013 07:35 PM EDT) \*Stéphane Higueret (01/22/2013 05:17 AM EDT)

Lewei Weng (01/23/2013 04:54 AM EDT)

Radu-Alexandru Todor (01/23/2013 05:12 PM EDT)

Masoud Alipour (01/25/2013 08:39 AM EDT)

\*Nyles Heise (01/25/2013 09:27 AM EDT)

Øyvind Grotmol (01/26/2013 07:49 AM EDT)

Kevin Bauer (01/28/2013 02:57 PM EDT)

Attention: If your name is posted here and you wish it removed please send email to the ponder@il.ibm.com.