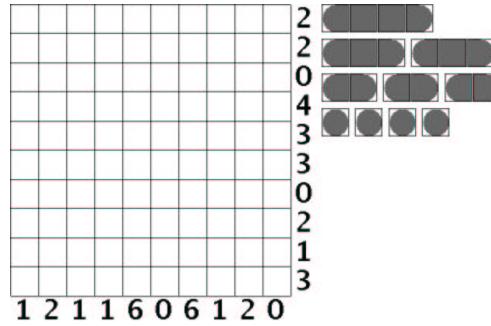


PUZZLES

The NINTH
 Brandon McPhail
 Sean Kelly

Battleships



An enemy fleet of battleships lies hidden in the 10 by 10 grid of quadrants. Your task is to deduce the location of each ship within the grid and sink them all.

Intelligence informs you that **4 Submarines** (each filling only a single quadrant), **3 Destroyers** (two quadrants long), **2 Cruisers** (three quadrants long), and **1 Battleship** (four quadrants long) are hidden in this sector. A **key** to the right of the grid will help keep track of this valuable information.

In addition, you've been supplied with a **number** for each row and column indicating the number of quadrants in that row or column that are occupied by **part** of an enemy ship.

This, in addition to your knowledge that **ships cannot occupy adjacent quadrants** (they might crash!), should be enough to help you sink them all.

Even Aristotle could do this.

CRYPTOQUOTE

XCQBO BUEXRPQFKD XII LQEBO
 MLPPFYFIFQFBP, XJBOFZXKP ZXK YB
 ZLRKQBA RMLK QL AL TEXQ FP OFDEQ.
 - PFO TFKPQLK ZEROZEFII

The text above represents a message that has been encrypted. Each letter in the original text has been substituted with a **unique** capital letter.

Try to decrypt the message by looking for digraphs (th, ch) and common words (is, the, to, be). Good luck!

Even Aristotle could do this.

Pop Quiz

Professor Paul Hovda has made the following announcement for all students taking his Modal Logic and Metaphysics course:

"Next week I would like to give a pop quiz. If you can correctly tell me which day I will give the quiz, then there will be no quiz."

Obviously, the quiz won't be on a Friday, since by Thursday evening everyone would know the date of the quiz. Since Thursday is thus the last possible date for the quiz, it can't be on Thursday either. Nor Wednesday. Nor Tuesday - wait a minute! Will there even be a quiz?

Even Pythagoras could do this.

Proof: $-1 = 1$

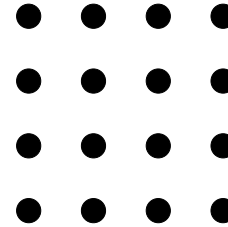
$$\begin{aligned} 1 &= \sqrt{1} = \sqrt{(-1)(-1)} \\ &= \sqrt{-1}\sqrt{-1} \\ &= i \cdot i = i^2 = -1 \end{aligned}$$

Wait a minute!

That can't be right, can it?

Even Aristotle could do this.

16 Dots 6 Lines



Connect these dots using 6 straight lines without lifting your pencil. The beginning point must be same as end point, and you may not visit the same dot twice.

Even Aristotle could do this.

So what if Freud can do it??

Even Freud could do this.

Even Pythagoras could do this.

Even Aristotle could do this.

Even Kant could do this.

Even Ray Mayer could do this.

Easy

Not easy

More challenging

This is a hard problem. "Support your local victualler"

Go ask him for help.

Think you know the answer?

For more info on these puzzles, go to
<http://www.reed.edu/~mcphailb/quest/>

Questions? Blitz: puzzles@reed.edu

