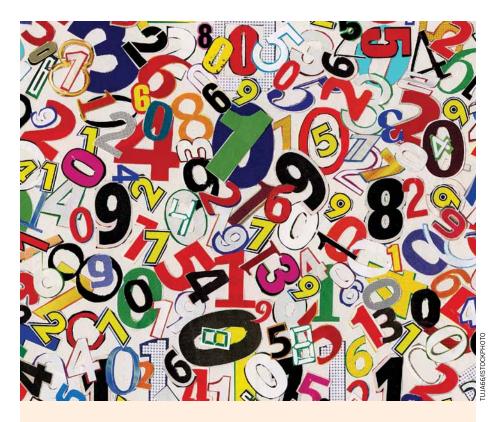
## solve it!

little problems with big solutions



## **Factor Groups**

- 1. Consider all the natural numbers between 1 and 100. In each case, count 1 as a factor.
  - a. Which have exactly 1 factor?
  - **b.** Which have exactly 2 factors?
  - c. Which have exactly 3 factors?
  - d. Which have exactly 4 factors?
  - e. Which have exactly 5 factors?
- 2. By examining your answers to question 1, can you see any relationships or patterns? Use any patterns you find to predict which numbers between 1 and 100 have exactly 6 factors. Check your predictions.
- **3.** Continue to investigate other numbers that have exactly 7, 8, 9, or 10 factors. Generalize any patterns that you find.

We encourage classroom teachers to pose this problem to your students and share their creative solutions. Please include a brief analysis of the specific strategy; examples of original student work or highquality digital images; and your name, the school name and address, and your e-mail address. E-mail submissions to Sherry L. Bair at slbair@ ilstu.edu, or send to her at IIlinois State University, Campus Box 4520, Normal, IL 61790-4520, by **March 30, 2013**. Published solutions will be credited.

(Solutions on page 318)