



Puzzle Corner

The Relative Riddle

by Dave Youngs

This month's *Puzzle Corner* is a classic riddle requiring reasoning to reconcile. (Please forgive the crude alliteration.) While many of you may have encountered this riddle before and already know the answer, the riddle probably caused curious consternation (I beg your pardon once more) the first time you saw it. Riddles like the one presented here automatically appeal to a wide variety of people and it's quite likely your students will enjoy puzzling over *The Relative Riddle*. Although not many riddles are mathematical in nature, this one is, and solving it involves a key concept in the area of mathematics known as set theory.

Before introducing this riddle to your class, please caution students *not to blurt out the answer* if they already know it or figure it out before the rest of the class. Doing this will rob other students of the opportunity to think the riddle through and solve it for themselves.

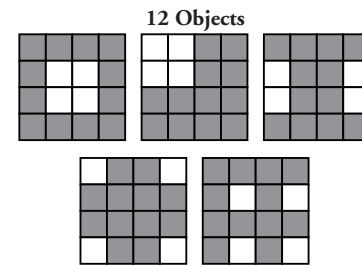
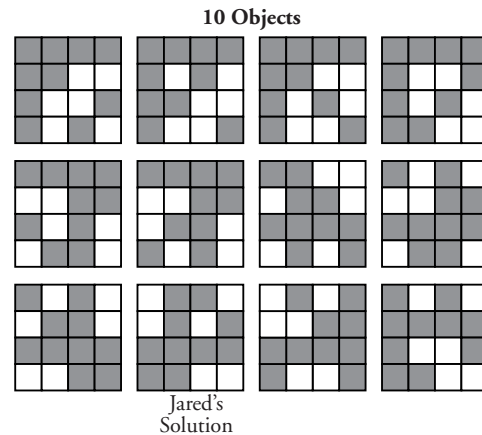
To help your students become better puzzle solvers and mathematical thinkers, it is imperative that you try to build a classroom puzzle and problem-solving ethos that encourages students to work on the problems before being shown any solutions. Doing this builds persistence, one of the most important problem-solving traits. In our current educational climate where getting the correct answer quickly and efficiently often seems more important than developing students' thinking skills, building persistence is often neglected.

I hope that you and your students enjoy this riddle. The solution and another puzzle will appear in the next issue of *AIMS*[®]. If you need the solution before then, you can send me an email (dyoungs@fresno.edu) or write to me in care of AIMS.

Solutions for September's Puzzle

The September *Puzzle Corner* was called *Uniquely Even*, and challenged students to arrange both 10 and 12 objects in a 4 x 4 grid so that each row, column, and diagonal had an even number of objects. The solutions to this puzzle were inadvertently printed

in the September magazine. They are printed again here because Jared Pokorny, a 7th grader from Garfield Heights Middle School in Garfield Heights, Ohio discovered another solution for the 10-object puzzle. Many thanks to Denise Sakmar, Jared's teacher, for sharing his solution with us. A complete list of known solutions, including Jared's, is given below. If anyone discovers more solutions not listed here, please bring them to our attention.



Solutions for Sequence Puzzlers:

Last month's *Puzzle Corner* had five lists of letters representing common sequences in which only the first letter of each item was given. Students were challenged to determine what the letters represented and fill in the missing letters.

1. S, M, T, W, T, F, S. (days of the week)
2. O, T, T, F, F, S, S, E, N, T . . . (the counting numbers)
3. J, F, M, A, M, J, J, A, S, O, N, D. (months of the year)
4. M, V, E, M, J, S, U, N, P. (planets in the solar system)
5. F, S, T, F, F, S, S, E, N, T . . . (ordinal numbers: first, second, ...)

The Relative Riddle

The Relative Riddle

Two fathers and two sons went fishing. Each of them caught a fish and none of them caught the same fish. However, they only caught a total of three fish. How is this possible?

