

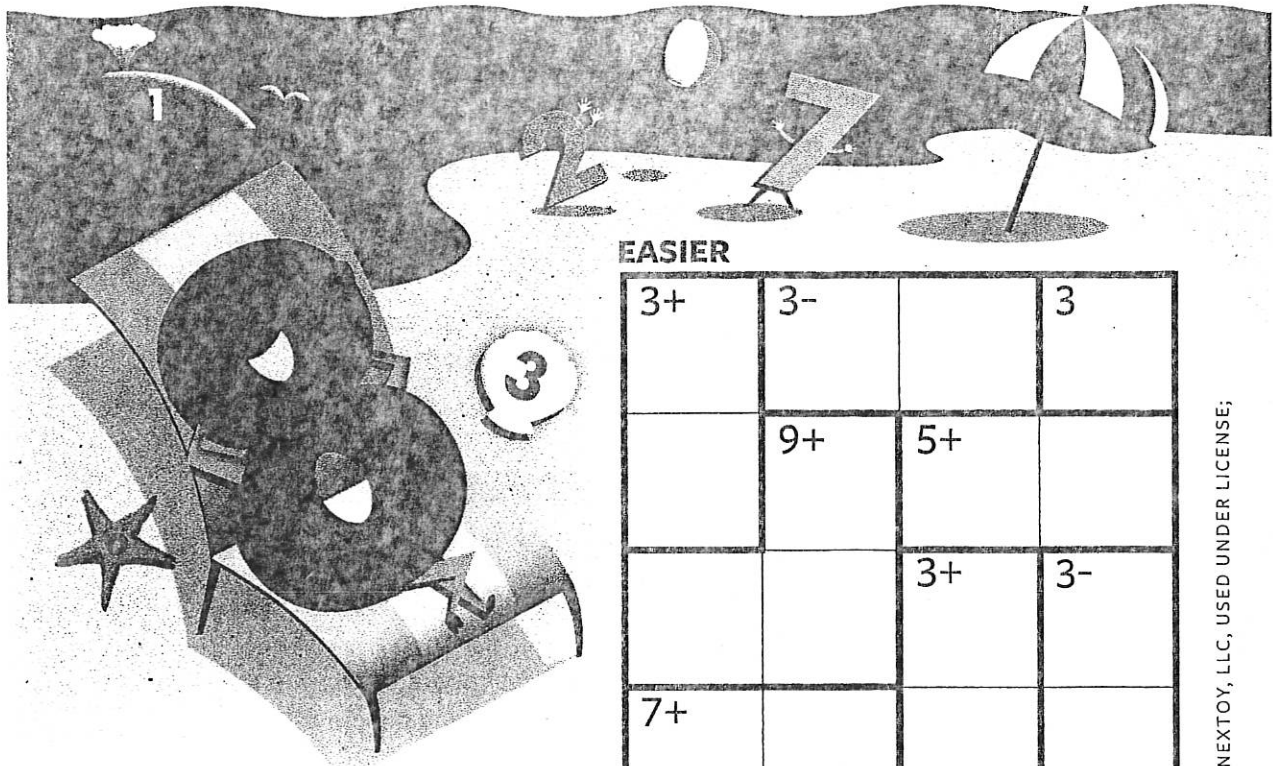
Word Study Sheet

Study the sentences below carefully. They will tell you where six children live and where their school is. Later you will be asked several questions about these locations.

Tommy lives two blocks north of Carlos and one block west of Marty.. Carlos is three blocks east of the school and two blocks north of Sharon. Lou lives three blocks north of the school and one block west of Kim.

Puz_ler


WILL SHORTZ PRESENTS **KENKEN®**



Invented by a Japanese teacher, the **KenKen puzzle** adds another layer of challenge by introducing math to the traditional Sudoku.

RULES

1. Fill in each box in the easier puzzle with a number from 1 to 4; in the harder puzzle, 1 to 6.
2. Do not repeat a number in any row or column.
3. The numbers in each heavily outlined set of squares, called cages, must combine (in any order) to produce the target number in the top corner using the mathematical operation indicated.

 For answers, see page 158. For a sample solved puzzle and two more puzzles, go to readersdigest.com/kenken.

EASIER

3+	3-		3
	9+	5+	
		3+	3-
7+			

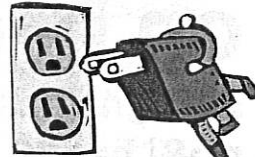
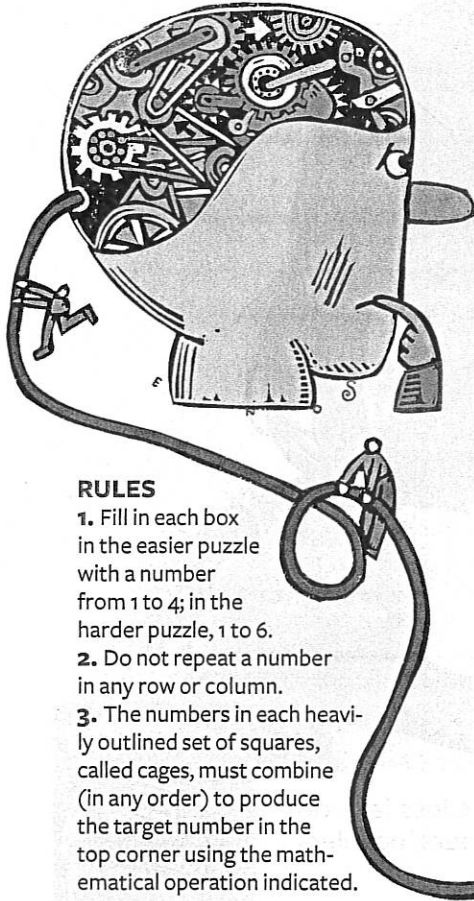
HARDER

9+		3x		3÷	
30x			2	60x	
3	2÷		5-		
4x		5	72x	90x	
5-					3-
	7+		7+		

Puz_ler

WILL SHORTZ PRESENTS KENKEN™

Invented by a Japanese teacher, the KenKen puzzle adds another layer of challenge by introducing math to the traditional Sudoku.



EASIER

3+	5+		11+
	2-		
7+		2	3+
	3-		

HARDER

1-		12+	3-		5-
30x			2+	2-	
3-					2-
4x		11+			
	14+		30x	11+	
6					

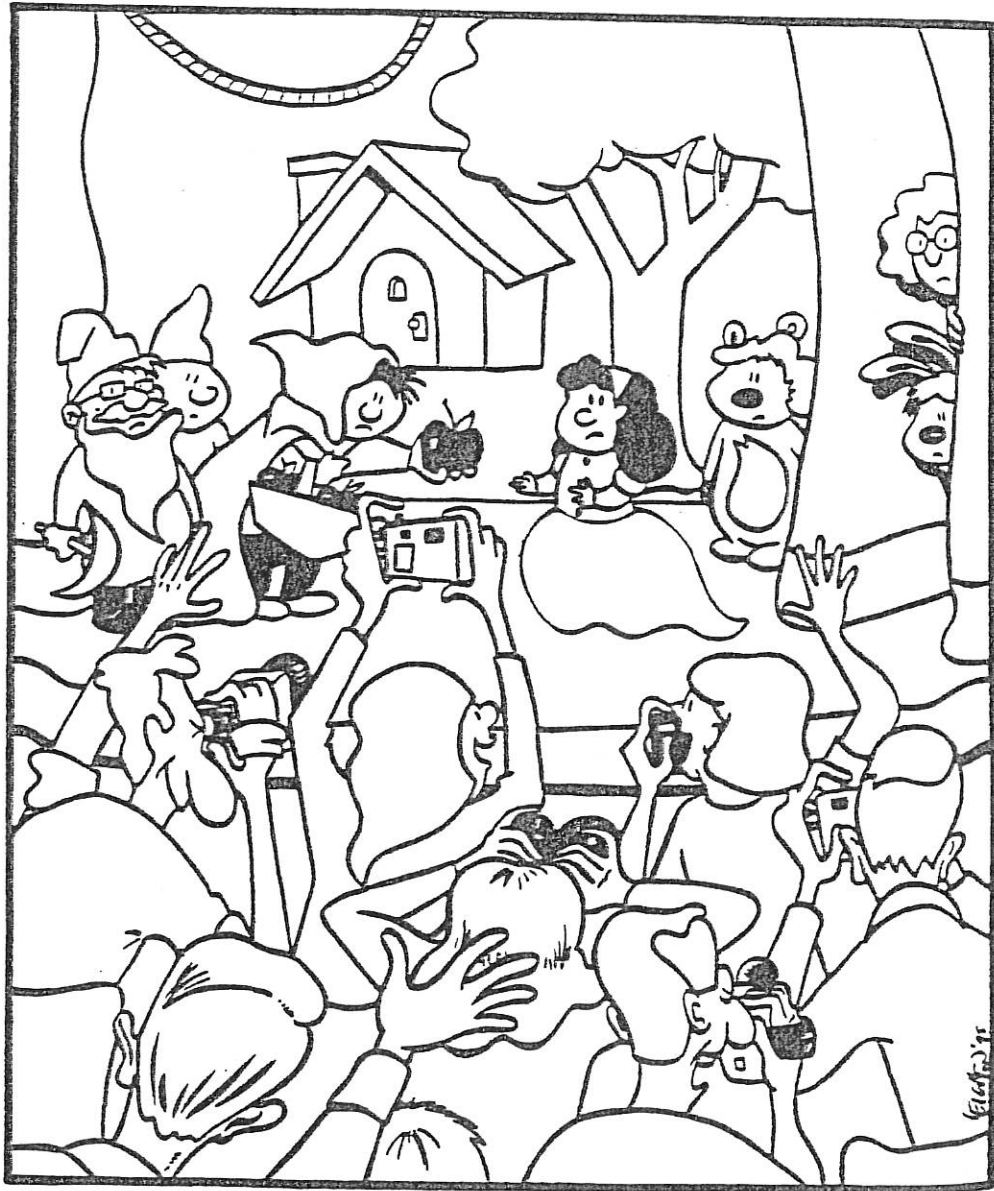
RULES

1. Fill in each box in the easier puzzle with a number from 1 to 4; in the harder puzzle, 1 to 6.
2. Do not repeat a number in any row or column.
3. The numbers in each heavily outlined set of squares, called cages, must combine (in any order) to produce the target number in the top corner using the mathematical operation indicated.

For answers, see page 178. For a sample solved puzzle and two more puzzles, go to readersdigest.com/kenken.

© 2008 GAKKEN CO., LTD., AND TRADEMARK NEXTTOY, LLC, USED UNDER LICENSE; ILLUSTRATED BY RANDALL ENOS

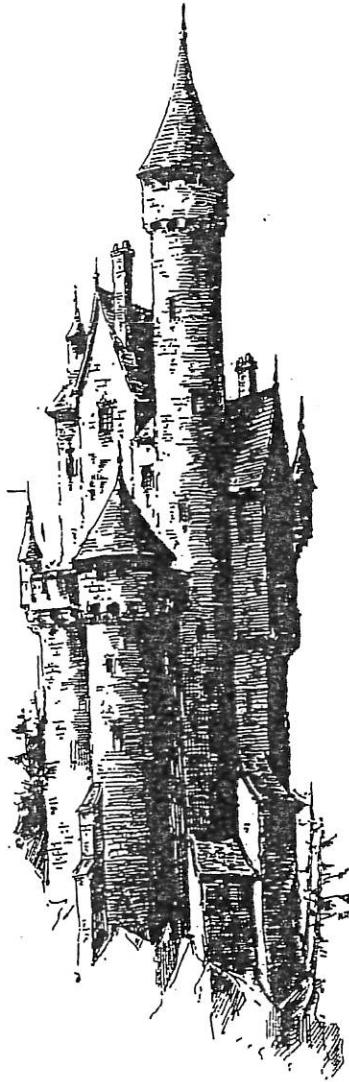
13. Here is a puzzle by Robert Leighton from the May 1995 issue of *Games World of Puzzles*, by the editors of *Games Magazine*. There are 11 pairs of congruent figures in this scene. For instance, the crescent-shaped head of the pick held by one of the dwarfs is congruent to the collar of the balding man at the lower right. Identify the other ten pairs, but *do not put any marks in this book*; that would spoil the puzzle for the next reader. Your teacher will give you a copy of the puzzle.



Reprinted with permission from GAMES WORLD OF PUZZLES Magazine (19 West 21st Street, New York, NY 10011).
Copyright © 1995, B. & P. Publishing Co., Inc.

The Most Challenging "Castle" Puzzle

Many years ago, an elderly king, his son and daughter, weighing 195 pounds, 105 pounds, and 90 pounds, respectively, were kept prisoners at the top of a high tower in Grimsley Castle. The only communication with the ground below was a cord passing over a pulley with a basket at each end. When one basket rested on the ground the other was opposite the window. Naturally, if one basket was more heavily loaded than the other, the heavier would descend; but if the excess on either side was more than fifteen pounds, the descent would become dangerous, because it would be so rapid that none of the prisoners could control it. The only thing available to help them in the tower was a cannonball, weighing 75 pounds. Still, they managed to escape. How did they do it? (Our thanks go out to Professor Hoffmann, who wrote this puzzle over a hundred years ago in his great book, *Puzzles Old and New*.)



CROSSING THE RIVER (Jealous Husbands)

Three married couples have to cross a river. The only way to cross the river is to use a row boat. The row boat they have holds a maximum of 2 people. The husbands are extremely jealous. During the river crossing you cannot leave any women in the presence of another man unless her husband is present. (On either shore or in the boat.)

Devise a sequence of steps to get the three married couples across the river without any of the husbands getting jealous.

CROSSING THE RIVER

Joe has \$5000 worth of gold in a bag. Sue has \$8000 worth of gold in a bag. Pedro has \$13000 worth of gold in a bag. Joe, Pedro, and Sue want to cross a river with their bags of gold. The only way across the river is to use a row boat that only has 2 seats. The row boat can handle either 2 people or one person and one bag of gold. Joe, Sue, and Pedro do not trust each other. At no point in time can anybody be left in the presence of more gold than they own.

How can Joe, Pedro, and Sue make it across the river?

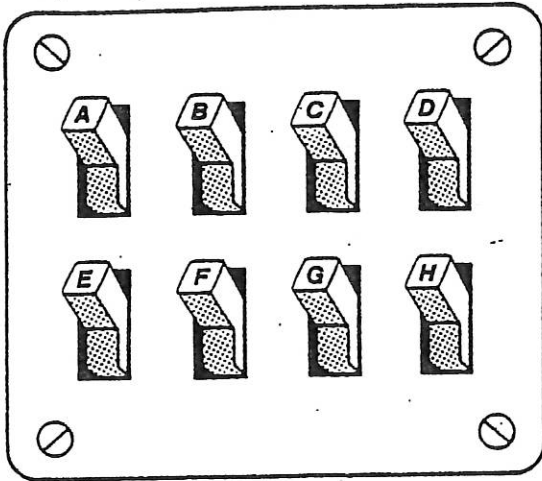
(Develop a plan to move all 3 people across the river with their bags of gold.
Write your steps in the space below.)

Chaperone

A camp counselor is hiking with Alice, Brad, and Candice. The four of them come upon a river that can only be traversed by riding a pulley chair that can hold either one or two people. Unfortunately, camp rules dictate that a counselor accompany a child on the chair. Furthermore, Brad and Candice are less than trustworthy, and the counselor does not want to leave sweet Alice alone with either of them. How do the four of them cross the river?



SWITCH PLAY



Sir Plutus Cratt has just had one of those newfangled electronic wall safes installed in his study. In place of the usual combination lock and dial, it has eight ordinary up-down switches labeled A to H as shown.

The instructions that came with the safe are simple enough. To open it, all Sir Plutus has to do is set each switch either up or down so that each of the following conditions is true:

1. Neither B nor C is the same as D.
2. G is down only if E is not the same as H.
3. A and G are different if (but only if) E and G are in the same positions.
4. G is down if D is down, but G is up if B is down.
5. D is up, unless E is the same as F.
6. A is not the same as B if either A or E is down.
7. A, F, and G are not all the same.

It may or may not confuse the burglars, but it has certainly confused Sir Plutus. How should he set the switches to open the safe?