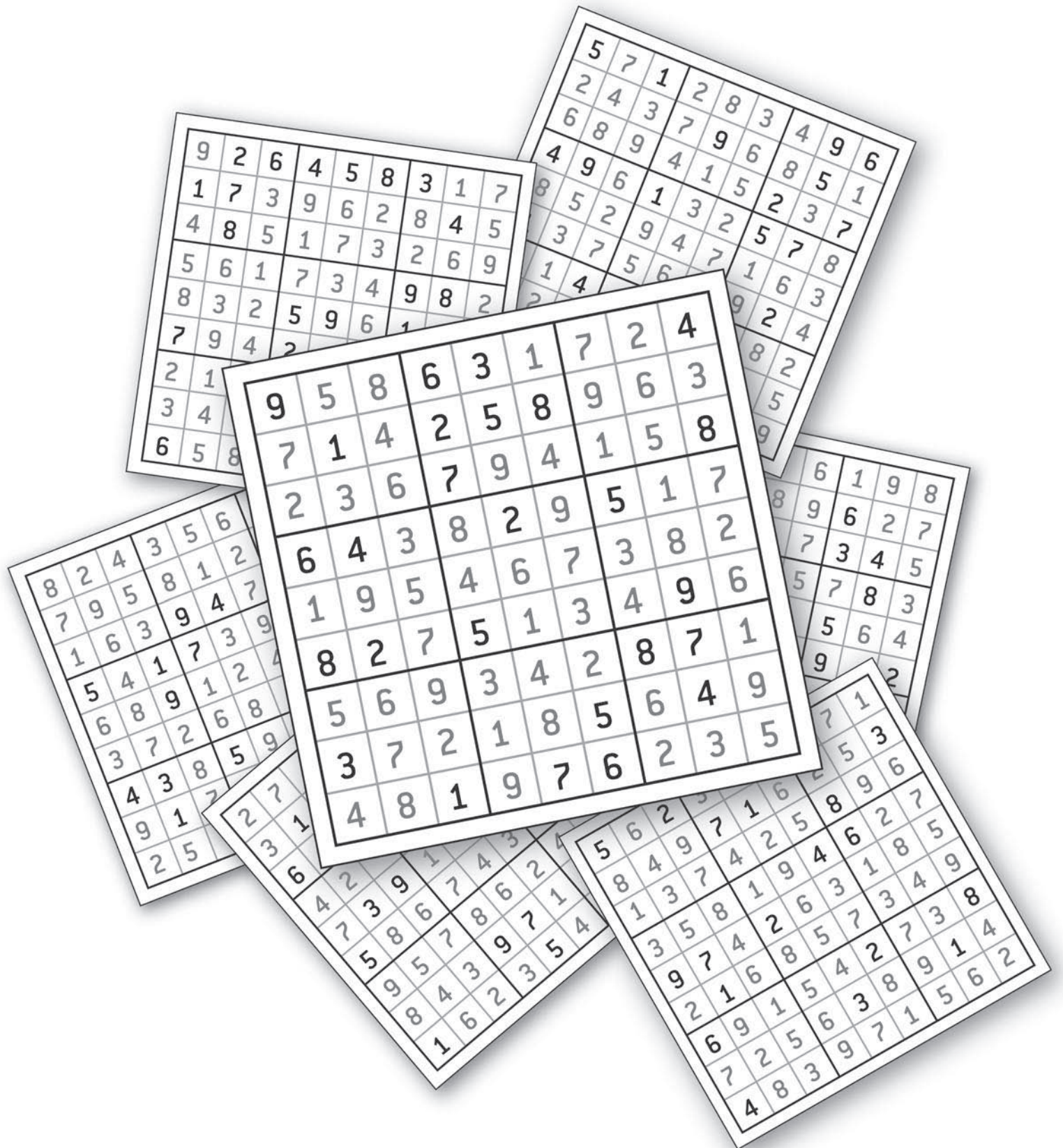


Solutions to Puzzles in "The Science Behind Sudoku," June 2006



17-Clue Puzzle

3	1	8	4	5	6	2	7	9
2	6	7	3	9	1	8	4	5
4	5	9	2	8	7	6	1	3
9	8	6	5	1	2	4	3	7
7	2	3	9	6	4	5	8	1
5	4	1	8	7	3	9	6	2
8	7	2	6	3	5	1	9	4
6	3	5	1	4	9	7	2	8
1	9	4	7	2	8	3	5	6

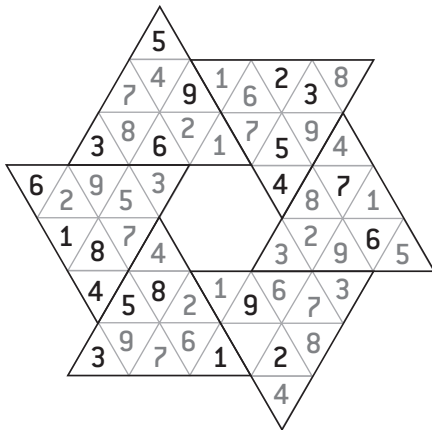
Solution Methods Example

5	7	1	2	8	3	4	9	6
2	4	3	7	9	6	8	5	1
6	8	9	4	1	5	2	3	7
4	9	6	1	3	2	5	7	8
8	5	2	9	4	7	1	6	3
1	3	7	5	6	8	9	2	4
3	1	4	6	5	9	7	8	2
9	2	8	3	7	1	6	4	5
7	6	5	8	2	4	3	1	9

Variations on a Theme (a)

G	T	A	R	D	N	E	I	M
D	N	T	G	I	R	A	M	E
I	G	E	T	N	A	M	D	R
T	I	R	N	A	M	D	E	G
R	A	I	D	M	E	N	G	T
M	R	N	I	E	D	G	T	A
A	M	D	E	R	G	T	N	I
N	E	M	A	G	T	I	R	D
E	D	G	M	T	I	R	A	N

Variations on a Theme (b)



Variations on a Theme (c)

4	1	8	+ 2	3	9	= 6	5	7
6	9	5	7	8	1	3	4	2
2	7	3	+ 5	4	6	= 8	1	9
9	6	1	8	5	3	2	7	4
3	5	4	+ 6	2	7	= 9	8	1
7	8	2	9	1	4	5	6	3
5	4	6	+ 1	9	2	= 7	3	8
8	3	9	4	7	5	1	2	6
1	2	7	+ 3	6	8	= 4	9	5

Variations on a Theme (d)

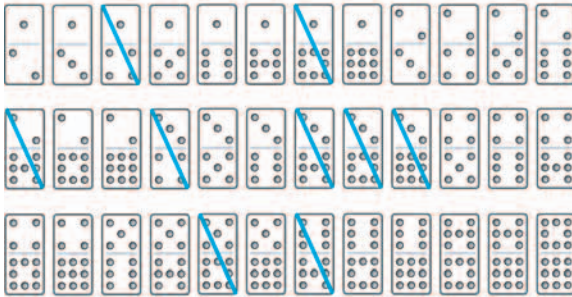
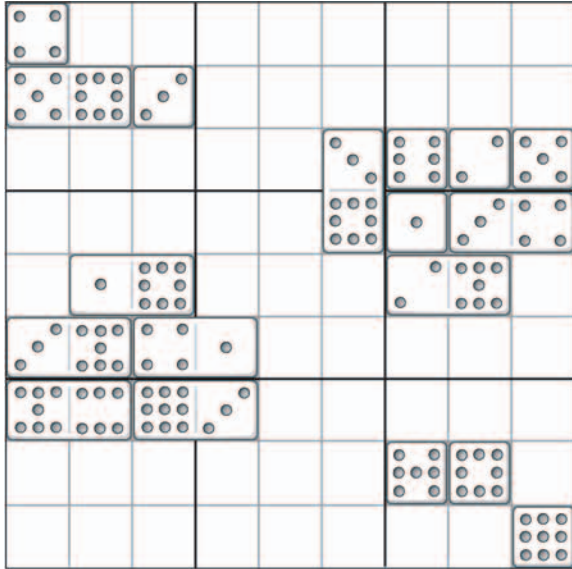
9 > 8 > 4	7 > 1 < 6	5 > 3 > 2
∨ ∨ ∨	∧ ∨ ∨	∧ ∨ ∨
7 > 3 < 6	9 > 2 < 5	8 > 4 > 1
∨ ∨ ∨	∨ ∨ ∨	∨ ∨ ∨
1 < 2 < 5	8 > 3 < 4	7 < 9 > 6
8 > 5 < 9	6 < 7 > 3	1 < 2 < 4
∨ ∨ ∨	∨ ∨ ∨	∧ ∨ ∨
3 > 1 < 7	4 < 8 > 2	9 > 6 > 5
∧ ∨ ∨	∧ ∨ ∨	∨ ∨ ∨
6 > 4 > 2	5 < 9 > 1	3 < 7 < 8
5 < 6 > 1	3 < 4 < 9	2 < 8 > 7
∨ ∨ ∨	∧ ∨ ∨	∧ ∨ ∨
4 < 7 > 3	2 < 5 < 8	6 > 1 < 9
∨ ∨ ∨	∨ ∨ ∨	∨ ∨ ∨
2 < 9 > 8	1 < 6 < 7	4 < 5 > 3

Go to next page for the solution to Variations on a Theme (e)

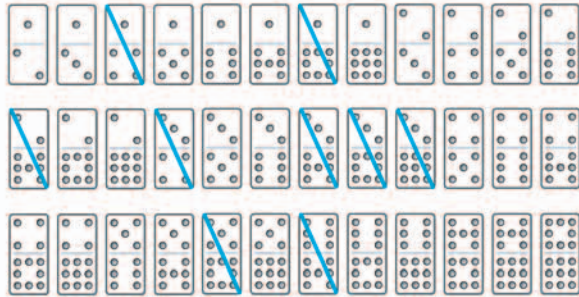
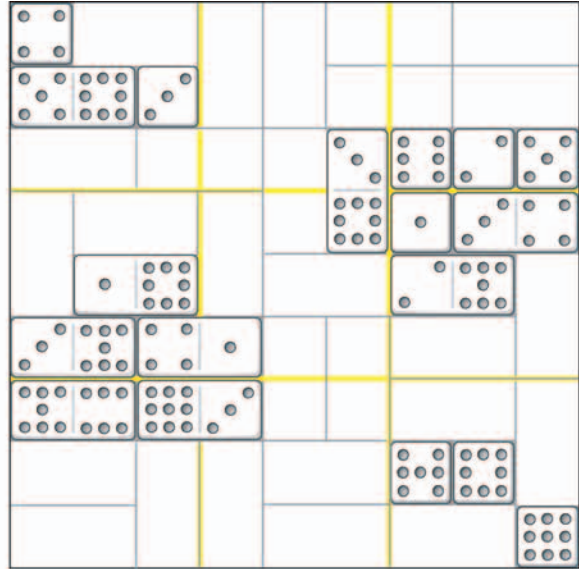
Variations on a Theme (f)

8	3	2	7	6	1	9	4	5
1	5	7	4	2	9	3	8	6
6	9	4	3	5	8	7	1	2
7	2	5	8	9	4	6	3	1
4	8	3	1	7	6	2	5	9
9	6	1	5	3	2	8	7	4
4	3	9	2	7	8	6	1	5
8	5	2	3	1	6	9	4	7
6	1	7	5	4	9	2	8	3
7	8	1	9	2	3	5	6	4
3	6	4	8	5	1	7	9	2
2	9	5	7	6	4	8	3	1
1	6	5	9	2	8	4	3	7
2	8	4	1	7	3	6	9	5
9	3	7	5	4	6	1	8	2
6	9	8	2	3	4	5	7	1
3	7	1	6	5	9	8	2	4
5	4	2	8	1	7	3	6	9
8	2	3	4	9	1	7	5	6
4	5	6	7	8	2	9	1	3
7	1	9	3	6	5	2	4	8

Original Puzzle (e) in "Variations on a Theme" Box



Corrected Puzzle (e)



The domino puzzle has one solution (*shown at right*) when the puzzle includes the outlines for the dominoes (*above right*). In the absence of the outlines (*above left*), the puzzle would have two solutions: the 9-5 and 5-4 dominoes in the bottom right quadrant of the solution, which lie horizontally now, could be placed vertically instead.

Variations on a Theme (e) solution

