Playing With Squares

				1			2			3	4	
5		6	7		8				9			
									10			
				11				12				
13	14							15				16
							17				18	
	19	20				21					22	
23										24		
									25			
	26	27				28		29				
	30					31						
							32		33			34
	35		36			37						
		38							39			

All across and down "words" are squares. In addition, the numbers must satisfy the clues listed on the next page.

Across:

- ³ 38 across plus eighty
- ⁶ First three digits are last three digits of 10 across minus ten
- 10 2 down plus last three digits of 26 across
- 11 Last three digits are same as last three digits of 13 across
- 13 First four digits are the last two digits plus 10 across
- 15 First and fourth digits are the same
- 18 Same as 36 down
- 19 Same as 30 across
- 21 Second digit equals last digit plus first digit times third digit
- 22 Same as 7 down

Down:

- 1 Same as 28 down
- 2 18 across times 7 down
- 4 First three digits are last three digits of 16 down minus four
- ⁵ One less than 39 across plus 36 down reversed plus twice 31 across
- 7 Same as 22 across
- 8 First three digits are 31 across rearranged
- ⁹ Second and last digits are the same
- ¹¹ First, fourth, and fifth digits are the same
- 12 Same as last two digits of 13 across
- ¹⁴ Third and last digits are the same
- 16 Last two digits are same as 22 across

- 23 Last four digits equal 21 across plus forty
- ²⁵ First digit equals the sum of the other digits
- 26 First digit equals the product of the second and fifth digits
- 30 Same as 19 across
- 31 33 down minus one hundred
- 32 Last digit is sum of first and third digits
- 35 First two digits are first two digits of 23 across plus eleven
- 38 Same as 36 down
- 39 First digit is sum of last two digits

- 17 First digit is sum of last two digits
- 20 Same as last two digits of 13 across
- 21 Same as 37 down
- 24 First two digits are the same as the first two digits of 23 across
- 27 First three digits are consecutive in order
- 28 Same as last two digits of 6 across
- 29 First two digits are same as 7 down
- 33 31 across plus one hundred
- 34 Twelve times 38 across, then add 7 down
- 36 Same as 18 across
- 37 Same as 21 down

Solution is on next page

				2			1			1	4	4
7		2	1	5	7	6	0	2	5		1	
9			6		5		2		1	2	2	5
2				3	6	8	4	4	9		4	
1	2	7	4	4	9			9	8	5	9	6
	7			8			9		4		6	4
	6	4		3		3	7	2	1		1	6
8	8	9	4	3	7	6	1			8		4
	8			6			4		9	8	0	1
	9	3	1	0	3	2	0	1		2		6
	6	4		4		5	7	6		0		
		5					3	9	6	9		7
	9	9	6	0	3	3	6		7			8
		6	4			6			6	7	2	4

Solution