

CrossFigure - Hard Puzzle #46

This puzzle is like a crossword, but with numbers. Each digit occupies a square and can be a part of a "word" in the across and down directions.

Rules:

- "Words" may not start with a zero.
- "Words" read from left to right and top to bottom.
- There is one unique solution which satisfies all the clues given below.
- Some "words" may not have clues. They will be determined by the "words" which intersect them.

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	40		41			42	43		
44	45							46		47	48
49					50			51			
52							53				

Across

- 1 Mean of 53 across and 1 down
- 5 First two digits are the same as first two digits of 47 down
- 10 21 across minus 8 down
- 11 30 across minus 16 across
- 12 Half of 24 down, then subtract 20 down
- 13 Seven times a prime number
- 14 40 down minus 6 down
- 15 A cube
- 16 Mean of 23 across and 42 across
- 18 7 down divided by 28 down
- 19 25 across minus 32 across
- 21 A prime number
- 23 37 down minus 33 across
- 25 Twice 28 down
- 26 25 across minus 31 across
- 27 48 down minus 39 across
- 29 30 across minus 31 across
- 30 Mean of 16 down and 37 down
- 31 8 down divided by 50 across
- 32 25 across minus 26 across
- 33 Three-fifths of 34 across
- 34 37 down minus 31 across
- 35 Mean of 51 across and 38 across
- 38 23 across minus 11 across
- 39 5 across divided by 13 across
- 41 A square
- 42 Mean of 26 across and 18 across
- 44 6 down minus 27 across
- 46 44 across minus 48 down
- 49 Mean of 45 down and 24 down
- 50 18 across minus 38 across
- 51 Two hundred eighty-four more than 44 across
- 52 19 down times 31 across
- 53 Thirty-one times a prime number

Down

- 1 44 down minus 39 across
- 2 Eight times a prime number
- 3 30 across times 25 across
- 4 47 down plus 41 across
- 6 Mean of 20 down and 3 down
- 7 Five hundred eight less than 46 across
- 8 Mean of 9 down and 39 across
- 9 32 across times 42 across
- 16 39 across minus 38 across
- 17 26 across minus 50 across
- 19 52 across divided by 32 across
- 20 Fifteen times 27 across
- 21 A prime number
- 22 19 across plus 10 across
- 23 Mean of 43 down and 15 across
- 24 Twenty-two times a prime number
- 26 17 down plus 50 across
- 28 Mean of 15 across and 29 across
- 36 31 across plus 42 across
- 37 A square
- 39 22 down minus 45 down
- 40 A prime number
- 42 Twice the result of 44 across minus 27 across
- 43 A prime number
- 44 Twice the result of 48 down plus 11 across
- 45 Eight times 50 across
- 47 Seventy-two times 11 across
- 48 Mean of 16 down and 1 down

Solution:

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