

CrossFigure - Hard Puzzle #24

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:

1. "Words" may not start with a zero.
2. "Words" read from left to right and top to bottom.
3. There is one unique solution which satisfies all the clues given below.
4. 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			54				55			56	

Across

- 1 46 down minus 50 down
- 3 1 across plus 29 across
- 5 23 across minus 40 across
- 8 49 down minus 55 across
- 9 Six times a prime number
- 12 Twice the result of 37 down plus 5 across
- 14 Nineteen times a prime number
- 15 Twice a prime number
- 17 31 across minus 44 across
- 20 52 across divided by thirty-four
- 21 48 down plus half of 38 across
- 23 Twice a prime number
- 25 55 across minus 30 across
- 27 Three times a prime number
- 29 28 down minus 50 down
- 30 56 across plus 20 across
- 31 3 across minus 1 across
- 32 17 across plus 8 across
- 33 Its digits total 20 across
- 36 Twice the result of 45 across minus 24 down
- 38 Twice a prime number
- 40 39 down minus 49 across
- 43 36 across minus 25 across
- 44 47 down minus half of 32 across
- 45 A prime number
- 49 Forty-two times a prime number
- 51 Twice a prime number
- 52 2 down plus half of 53 across
- 53 36 across minus 20 across
- 54 29 down minus half of 30 across
- 55 Five times a prime number
- 56 Half of 16 down, then subtract 23 across

Down

- 2 Three times a prime number
- 3 Mean of 27 across and 4 down
- 4 A prime number
- 6 A prime number
- 7 Half of 15 across, then subtract 6 down
- 8 Seven times 32 across
- 10 A prime number
- 11 Mean of 30 across and 56 across
- 13 Twenty-six times a prime number
- 14 Six times a prime number
- 16 Four times a prime number
- 18 A palindrome
- 19 5 across minus 53 across
- 22 10 down plus half of 38 down
- 24 A prime number
- 26 Twice a prime number
- 28 31 across plus 50 down
- 29 52 across minus 56 across
- 32 19 down times 25 across
- 34 Two-thirds of 14 down
- 35 Mean of 18 down and 29 down
- 37 Twice a prime number
- 38 Twenty-two times a prime number
- 39 Six thousand seventy-seven less than 15 across
- 41 Three thousand nine hundred seventy-four more than 45 across
- 42 Twice a prime number
- 46 Mean of 35 down and 11 down
- 47 5 across minus 8 across
- 48 31 across minus 56 across
- 49 Twice a prime number
- 50 Five times a prime number

Solution:

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