

Difficulty: ★★★★★

Cross Figure - Hard Puzzle #17

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
57							58					

Across

- 1 Three times a prime number
- 5 Eight thousand one hundred seventy-six less than 14 across
- 9 One hundred fifty-seven less than 49 down
- 10 Mean of 16 across and 19 down
- 13 Mean of 17 down and 21 down
- 14 Six thousand four hundred eighty-seven more than 1 across
- 16 Forty-eight times a prime number
- 18 24 down divided by 3 down
- 21 Mean of 27 across and 40 down
- 22 Twice the result of 13 across minus 21 down
- 25 48 down minus 38 down
- 27 21 across minus 32 across
- 28 Twice the result of 52 down minus 38 down
- 30 Mean of 1 down and 32 across
- 31 18 across minus 32 across
- 32 40 down minus 21 across
- 33 29 down minus 31 across
- 34 25 across plus 31 across
- 36 28 across minus 18 across
- 38 45 down plus half of 23 down
- 39 44 across plus 12 down
- 41 Rearranged digits of 38 across
- 44 Mean of 9 across and 44 down
- 47 Thirty-one times a prime number
- 50 Twenty-six times a prime number
- 53 40 down minus 8 down
- 54 1 across minus 35 down
- 55 37 down plus 15 down
- 57 A prime number
- 58 A prime number

Down

- 1 Mean of 38 down and 8 down
- 2 Thirty-one times a prime number
- 3 A prime number
- 4 15 down minus 30 across
- 5 28 across minus 21 down
- 6 4 down plus 40 down
- 7 43 down minus 44 down
- 8 48 down minus 49 down
- 11 39 across minus 44 across
- 12 Same as 11 down
- 15 42 down minus 27 across
- 17 51 down plus 21 down
- 19 13 across plus 31 across
- 20 Twice a prime number
- 21 34 across minus 28 across
- 23 41 across divided by four
- 24 Fourteen thousand four hundred fourteen more than 57 across
- 26 Half of 5 across, then subtract 20 down
- 29 42 down minus 17 down
- 35 38 down minus 23 down
- 37 53 across plus 56 down
- 38 39 across minus 40 down
- 40 27 across plus 31 across
- 42 Six times a prime number
- 43 Twenty times a prime number
- 44 Mean of 15 down and 40 down
- 45 39 across minus 33 across
- 46 47 across divided by 56 down
- 48 A prime number
- 49 36 across plus 41 across
- 51 Mean of 53 across and 9 across
- 52 Mean of 29 down and 3 down
- 53 14 across divided by 40 down
- 56 17 down divided by twenty-three

Solution:

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