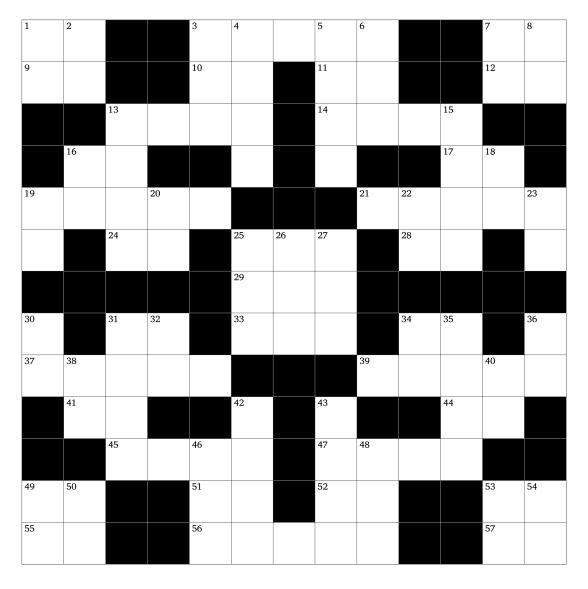# CrossFigure - Hard Puzzle #12

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.

Across

1 35 down divided by 1 down
3 4 down times 52 across
7 Half of 15 down, then subtract 13 down
9 19 down minus 10 across
10 Mean of 52 across and 53 across
11 Mean of 8 down and 49 down
12 54 down plus 24 across
13 47 across plus 25 across
14 Consecutive digits in descending order
16 Mean of 30 down and 1 down
17 Mean of 26 down and 1 down
19 Twenty-four times a prime number
21 Last two digits are the same as 28 across
24 A square
25 31 down minus 49 across
28 23 down minus 20 down
29 A cube
31 19 down minus 53 across
33 Twice a prime number
34 Twice the result of 22 down minus 50 down
37 First two digits are the same as first two digits of 6 down
39 Twice a prime number
41 Mean of 7 down and 57 across
44 10 across plus 36 down
45 43 down plus 36 down
47 Mean of 8 down and 43 down
49 18 down plus 34 down
51 29 across minus 19 down
52 A square
53 Mean of 9 across and 23 down
55 24 across minus 52 across
56 A prime number
57 16 across minus 10 across

Down

1 7 down minus 20 down
2 22 down minus 9 across
3 Forty-nine times 31 across
4 3 across divided by 38 down
5 Two thousand three hundred twenty-one more than 14 across
6 21 across minus 19 across
7 26 down minus 20 down
8 51 across plus half of 12 across
13 Sixty-nine times 57 across
15 Four times a prime number
16 Mean of 2 down and 26 down
18 Mean of 22 down and 49 down
19 40 down minus 38 down
20 40 down minus 53 down
22 26 down minus 28 across
23 57 across plus 55 across
25 Mean of 25 across and 33 across
26 Twice the result of 29 across minus 24 across
27 Four times a prime number
30 56 across minus 5 down
31 33 across plus 32 down
32 Mean of 7 down and 30 down
34 Half of 17 across, then subtract 2 down
35 Fifty-four times a prime number
36 53 across minus 57 across
38 A square
40 57 across plus 53 down
42 Half of 39 across, then subtract 37 across
43 A square
46 A square
48 49 down plus 16 across
49 Mean of 30 down and 49 across
50 Mean of 10 across and 40 down
53 Mean of 49 down and 2 down
54 Twice the result of 3 down minus 25 down

Solution:

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