## TripleCross - Hard Puzzle \#46

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

## Rules:

1. "Words" may not start with a zero.
2. "Words" in the 'across' direction read from left to right.
3. "Words" in the 'up' direction read along the upward diagonal to the right.
4. "Words" in the 'down' direction read along the downward diagonal to the right.
5. There is one unique solution which satisfies all the clues given below.

6. Some "words" may not have clues. They will be determined by the "words" which intersect them.


Across
12 down minus 47 up
5 Three hundred ninety-nine more than 37 across

1452 up minus 10 across
7 Four thousand five hundred twenty-five 1521 across minus 28 across less than 31 across
1042 across plus 51 down
1241 down minus 44 up
13 Four times a prime number
16 Sixty-two times a prime number
19 Ten times a prime number
21 Seven times a prime number
23 A prime number
263 down minus 51 down
27 Mean of 46 down and 34 across
28 A cube
31 Mean of 53 up and 11 down
3416 down plus 14 up
3535 up divided by 41 down
37 Rearranged digits of 47 up
3929 down times 44 up
4243 up minus 6 down
43 Same as 49 up
45 Fifty-six times a prime number
50 Its digits total 14 up
52 Sixty-five times a prime number

## Up

8 Twice a prime number
9 Mean of 39 up and 25 up

17 Its digits total 26 across
20 Mean of 51 down and 15 up
21 Consecutive digits unordered
22 A prime number
25 Mean of 48 up and 54 up
32 Eight thousand seven hundred seventy-one more than 53 up
3352 across minus 27 across
3541 down times 16 down up
39 A square
407 down times 34 across
43 Six times a prime number
4414 up plus 28 across
4710 across plus half of 35 down
48 A prime number
49 Mean of 42 across and 33 up
5252 across minus half of 30 down
53 Ten thousand five hundred more than 39 across

38 Two hundred eighty-six more than 4018 Eight thousand nine hundred fifty

5421 up minus half of 33 up

## Down

152 up plus 15 up
2 A prime number
315 up minus 51 down
4 Thirty-five times a square
6 Twice the result of 1 across minus 21 across
710 across plus 42 across
83 down minus 12 across
11 Twice a square
12 Six times a prime number
16 Mean of 15 up and 19 across
17 Eighteen thousand ninety-seven less than 38 up more than 53 up
24 Twenty-four times a prime number
25 Mean of 7 across and 16 across
2946 down minus 15 up
30 Twelve times a prime number
35 Last two digits are the same as last two digits of 24 down
36 A prime number
3823 across minus 32 up
40 A prime number
419 up divided by nine
464 down minus 5 across
51 Twice 28 across

## Solution:



