## TripleCross - Hard Puzzle \#40

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
1 First two digits are the same as 31 down
6 Thirty-nine times a prime number
911 across minus 5 down
10 Mean of 33 down and 6 up
1144 down plus 52 up
1252 up plus half of 39 across
13 Four times 15 down
14 Fourteen times 32 up
154 down plus 20 across
17 Six times a prime number
2042 up minus 25 down
24 Mean of 41 across and 4 down
26 Mean of 37 up and 3 down
29 Twenty times a prime number
32 Two thousand three hundred thirty-seven more than 17 across
3534 down minus half of 16 up
38 Nine times 6 up
399 across minus 52 up
41 Mean of 5 down and 22 up
4239 across plus 32 up
43 A square
44 Mean of 24 up and 22 up
46 Eight hundred sixty-one less than 45 up
49 A prime number

## Up

6 Mean of 49 up and 22 up
719 up plus 52 up
10 Rearranged digits of 38 across
16 Eight thousand one hundred forty-four more than 1 across
18 Mean of 1 down and 18 down
19 A square
2015 down plus 2 down
21 Last two digits are the same as last two digits of 34 down
22 Mean of 49 up and 7 up
23 Seven times 5 down
24 Mean of 13 across and 52 up
25 Six times a prime number
32 Three-fourths of 52 up
365 down plus 33 down
37 Mean of 41 across and 36 up
3811 across minus 18 down
42 Thirty-seven times a prime number
44 Two thousand one hundred sixty-two less than 46 across
45 Fifty-seven times a prime number
48 Sixteen thousand three hundred sixteen less than 16 up
4943 across plus 5 down
50 Consecutive digits unordered
51 Twice the result of 6 across minus 40 down
524 down minus 41 across

## Down

144 up plus 44 across
220 up minus 28 down
324 up minus 14 down
4 Mean of 47 down and 22 up
529 across minus half of 44 up
812 across times 27 down
9 Seven thousand five hundred eighty-three more than 16 up
1115 across minus 9 across
12 Thirteen times 18 down
14 Two-fifths of 38 up
1510 across minus 43 across
1811 across minus 24 across
25 A prime number
26 Mean of 9 down and 31 down
278 down divided by 38 up
2811 across minus 42 across
30 Mean of 38 across and 33 down
3115 across minus 20 across
33 Mean of 44 across and 26 across
34 Ten thousand two hundred sixty-three more than 9 down
40 Thirty-one times a prime number
44 Twice the result of 24 across minus 14 down
4615 across minus 11 down
471 across minus 25 up

## Solution:



