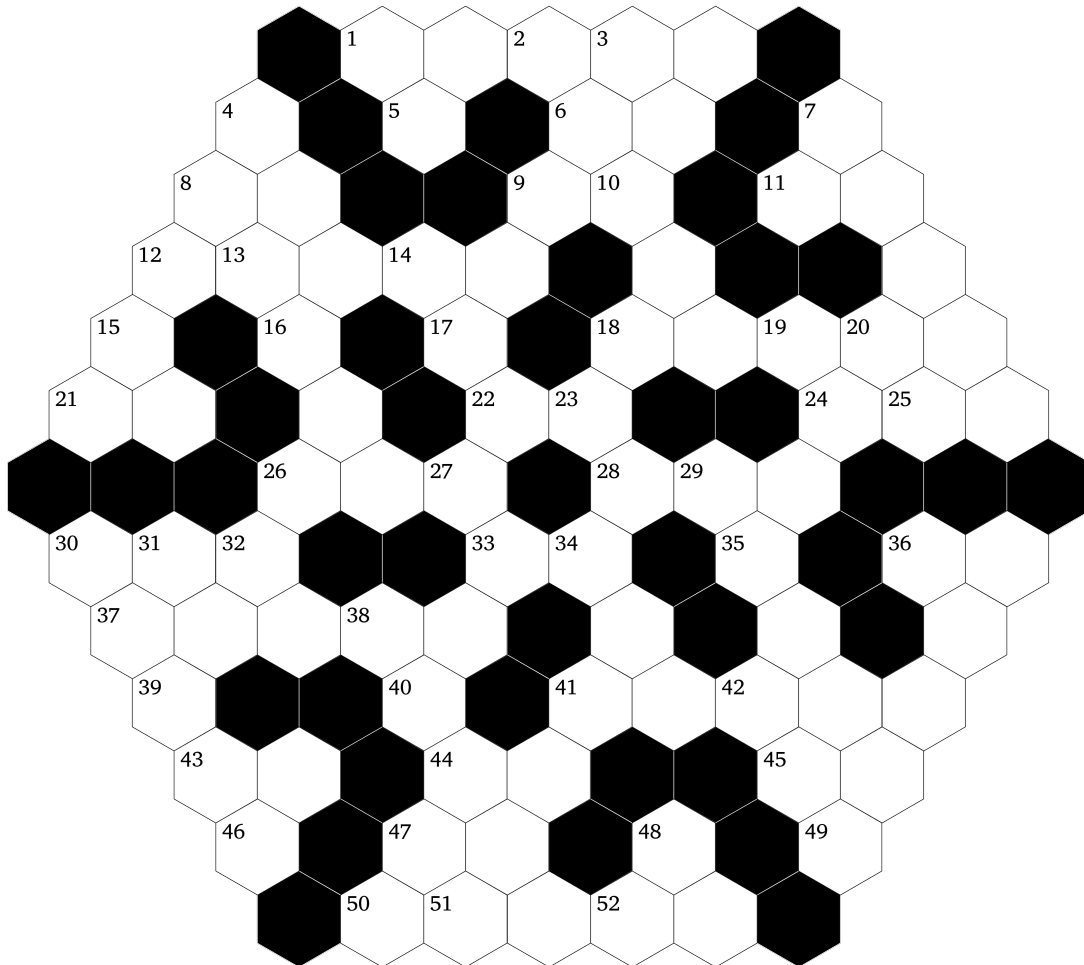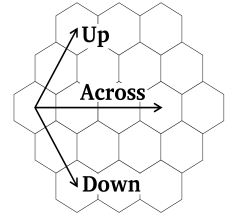# TripleCross - Hard Puzzle #52

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 A prime number
6 42 down minus 32 down
8 23 down minus 36 down
9 Twice the result of 38 down minus 12 across
11 43 across minus 6 across
12 A prime number
18 Twice the result of 8 down plus 45 up
21 43 across minus 1 down
22 16 up plus 8 across
24 Five times 34 up
26 50 up minus 42 up
28 14 down plus 20 down
30 Half of 34 down, then subtract 21 across
33 9 across minus 27 up
36 47 across plus 13 up
37 Seven thousand four hundred ten less than 12 across
41 Five times a prime number
43 9 across plus 19 down
44 16 up minus 27 up
45 Mean of 8 across and 25 up
47 Mean of 25 up and 3 down
50 First two digits are the same as 23 down

Up

5 Twice the result of 1 down minus 47 across
10 Its digits total 42 up
11 23 down minus 44 across
13 Mean of 42 up and 1 down
16 21 across plus 44 across
17 Fifteen thousand two hundred forty less than 37 across
21 Fifty-seven times a prime number
23 Twice the result of 40 up plus 33 across
25 1 down minus 45 up
27 47 across minus 42 up
34 47 across plus 6 across
35 Thirteen times a prime number
37 Mean of 1 down and 11 across
39 Mean of 35 up and 51 up
40 Five times a prime number
42 25 up minus 47 across
45 Mean of 47 across and 47 down
46 11 across plus 3 down
49 23 down times 4 down
50 28 across minus 21 across
51 A prime number
52 48 down reversed

Down

1 45 across plus 25 up
2 Thirteen thousand five hundred forty-two less than 37 across
3 43 across minus 1 down
4 49 up divided by 32 down
7 Mean of 50 across and 13 up
8 51 up minus 37 across
14 Twenty-two times 47 down
15 43 across minus half of 6 across
19 7 down minus half of 50 across
20 33 across plus 6 across
23 Same as 32 down
27 37 up minus 11 up
29 Last two digits are the same as last two digits of 41 across
30 A prime number
31 Twice the result of 42 down minus 22 across
32 36 down plus 8 across
34 Twice a prime number
36 Mean of 23 down and 52 up
38 23 up times 1 down
42 16 up plus 9 across
47 36 across minus 6 across
48 3 down plus 33 across

Solution: