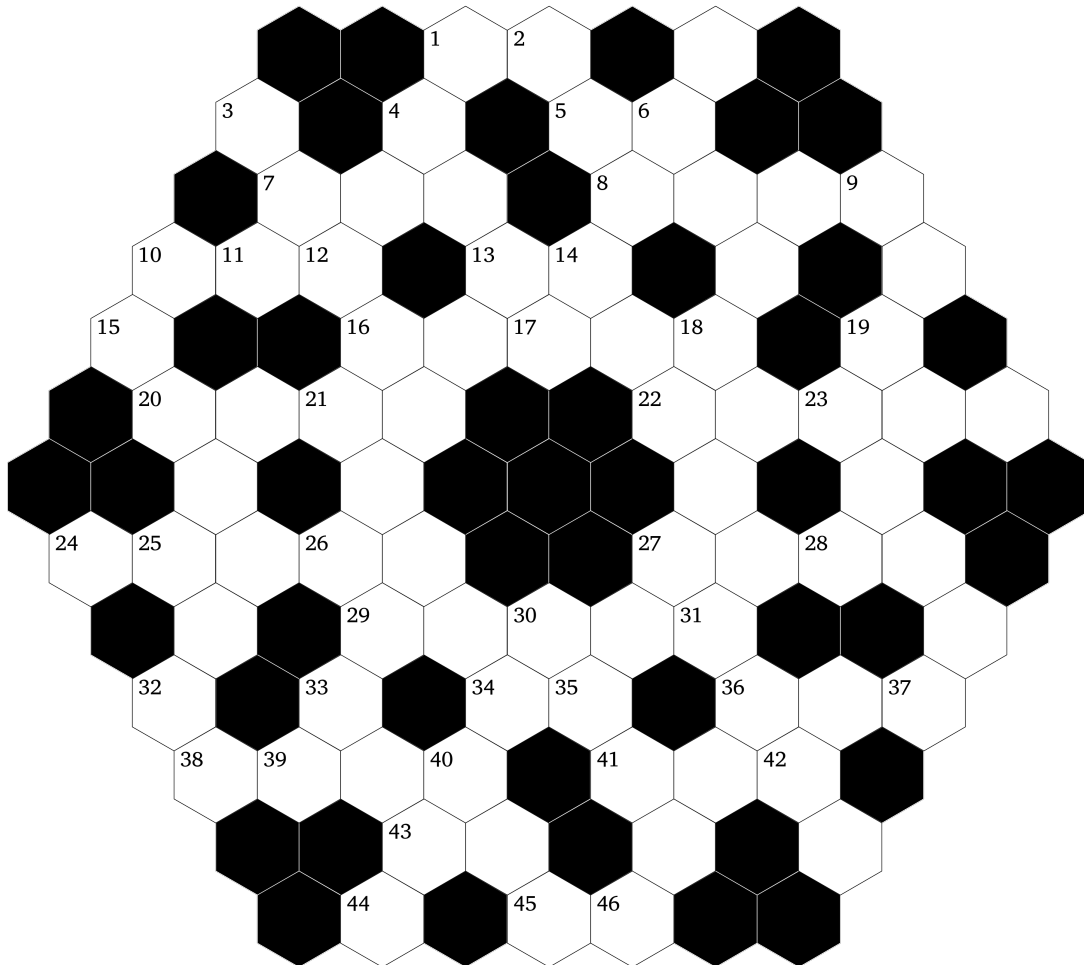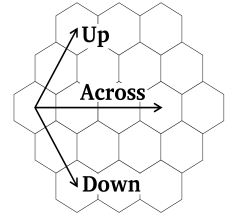# TripleCross - Challenging Puzzle #14

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 Mean of 42 up and 31 up
5 Mean of 37 up and 21 up
7 A prime number
8 Sixty-five times a prime number
10 Twice a prime number
13 42 up minus 26 down
16 22 across minus 27 down
20 Five hundred five less than 22 up
22 Four thousand two hundred fifty-eight more than 17 up
24 Sixty-six times a prime number
27 Twice a prime number
29 Four times a prime number
34 Mean of 5 across and 19 down
36 33 down reversed
38 Twenty-four times a prime number
41 7 across plus 11 up
43 25 up minus 32 up
45 26 down minus 11 up

Up

11 A square
12 Thirty-nine times a prime number
15 43 across minus 32 down
17 21 down plus 46 up
21 Mean of 31 up and 32 down
22 12 up plus 45 across
23 23 down minus 28 up
25 20 across divided by 13 across
26 Four thousand two hundred nineteen more than 44 up
28 Nine times a prime number
31 Six times 45 across
32 Mean of 2 down and 1 across
35 8 across plus half of 10 across
37 Mean of 31 up and 42 up
39 Twice the result of 38 across minus 11 up
42 31 up minus 32 down
44 Half of 24 across, then subtract 41 across
46 Sixty-five times 5 across

Down

2 Nine times a prime number
3 Twenty-eight times a prime number
4 Twice a prime number
6 40 down minus 11 up
9 19 down minus 11 up
14 36 across times 42 up
15 A prime number
18 Twice 26 down
19 A prime number
21 Fifty-three times a prime number
23 Three times a square
25 31 up minus 42 up
26 21 up minus 45 across
27 Three times a prime number
30 Fifty times 5 across
32 37 up minus 43 across
33 36 across reversed
40 Three times a prime number

Solution: