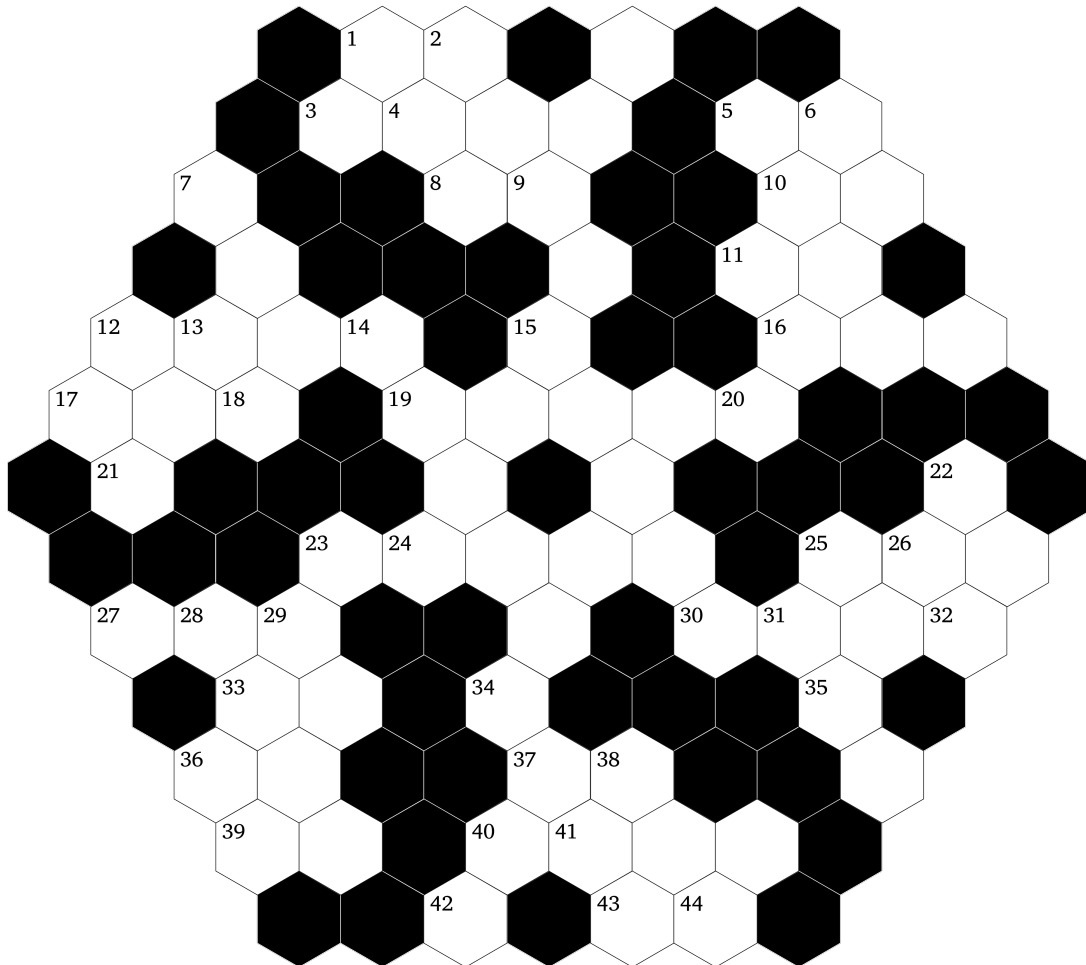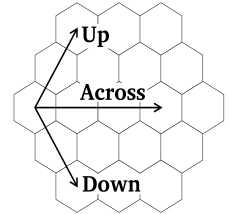# TripleCross - Challenging Puzzle #28

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 4 up minus 36 across
3 Forty-six times 17 down
5 22 down minus 17 down
8 Mean of 11 down and 32 up
10 Mean of 1 across and 25 across
11 Sum of digits in 12 across
12 Thirty-two times a prime number
16 A prime number
17 42 up minus 8 across
19 43 up plus half of 34 up
23 Mean of 24 up and 36 across
25 20 up divided by 1 across
27 Mean of 17 across and 22 down
30 Six times a prime number
33 9 up minus 42 up
36 Four-fifths of 11 down
37 Mean of 5 across and 32 up
39 21 up divided by 6 down
40 Mean of 2 down and 7 down
43 10 across minus 11 down

Up

3 Sum of digits in 30 across
4 8 across minus 36 across
8 31 up plus 41 up
9 Three times a prime number
11 27 across minus 8 across
17 Mean of 25 down and 44 up
18 3 up plus 33 across
20 Seventeen times a prime number
21 Thirty-nine times a prime number
24 Eight times a prime number
31 43 across minus 4 up
32 31 up plus 37 across
34 Six thousand nine hundred ninety-six less than 24 up
35 Nine times a prime number
36 Rearranged digits of 40 across
39 Mean of 17 across and 11 down
41 33 across minus 39 across
42 41 up times 1 across
43 Mean of 10 across and 3 up
44 37 across plus 25 down

Down

1 44 up plus 26 down
2 Eight times a prime number
5 Five times a prime number
6 Mean of 8 up and 44 up
7 32 up plus 17 across
11 A square
12 25 down plus half of 41 up
13 A square
14 Eight thousand eighty-two more than 24 up
15 Twenty-two times a prime number
17 6 down minus 31 up
22 29 down plus 43 up
25 33 across minus 43 across
26 37 across minus 36 across
28 Seventeen times a prime number
29 37 across minus 3 up
31 Twice the result of 5 down minus 28 down
34 Five times a prime number
36 Mean of 31 up and 11 down
38 Thirty-six times 36 down

Solution: