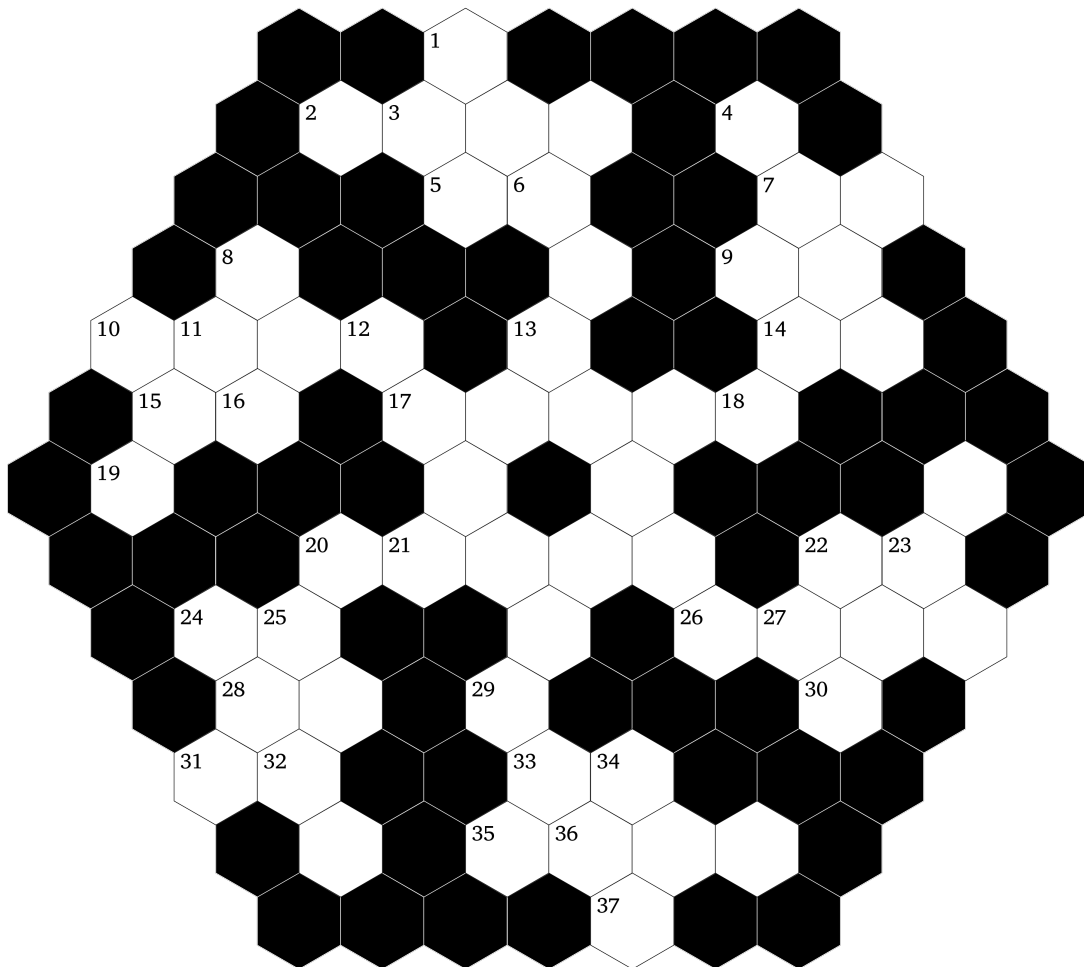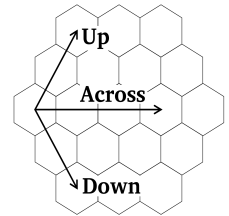Difficulty: ★★☆☆☆

TripleCross - Challenging 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

2 26 across minus 1 down
5 Three times 25 down
7 Mean of 9 across and 14 across
9 Mean of 27 down and 32 up
10 Twenty-six times a prime number
14 9 down minus 23 down
15 23 down minus 11 down
17 Twelve times a prime number
20 Its digits total 11 down
22 9 up plus 28 across
24 Half of 22 down, then subtract 6 up
26 35 across minus 9 down
28 11 down minus 14 across
31 Half of 9 across, then subtract 8 down
33 34 down minus 14 across
35 One thousand five hundred twenty-nine more than 1 down

Up

3 Mean of 9 down and 16 up
5 A square
6 5 across minus 37 up
9 5 up plus 25 down
16 36 up minus 9 down
18 17 across minus 29 up
19 A cube
21 Five times a prime number
27 3 down plus 10 down
29 Consecutive digits unordered
30 A prime number
31 Half of 10 across, then subtract 10 down
32 21 up minus 35 across
35 5 across plus 11 down
36 8 down plus 9 down
37 6 up minus 28 across

Down

1 Thirty-five times a prime number
3 24 down divided by 37 up
4 Twice the result of 30 up minus 27 down
8 10 down minus 31 across
9 35 up minus 24 across
10 5 across minus 14 across
11 Same as 15 across
13 Thirteen times a prime number
22 9 across plus 24 across
23 37 up reversed
24 37 up times 33 across
25 5 up minus 10 down
27 A square
29 Twelve times a prime number
34 9 across minus 14 across

Solution: