

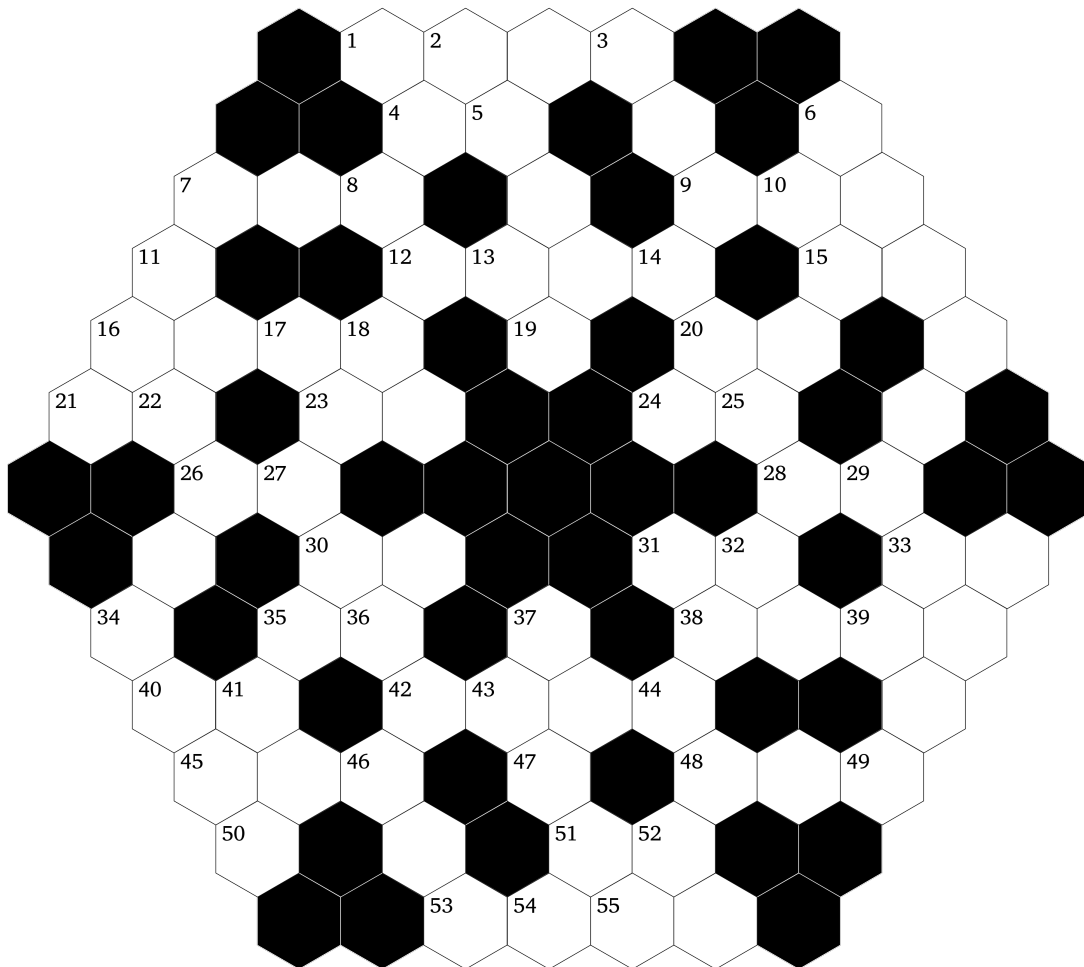
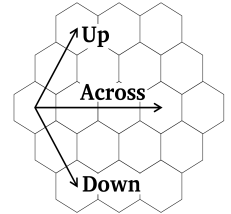
Difficulty: ★★★★★

TripleCross - Hard Puzzle #39

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 27 up minus half of 44 up
4 35 across plus 15 across
7 A palindrome
9 Mean of 13 up and 7 across
12 10 down plus 45 up
15 30 across minus 5 up
16 38 across minus 31 across
20 24 across plus half of 10 up
21 23 across minus 26 across
23 32 down plus 31 down
24 39 up minus 31 down
26 Mean of 5 up and 19 up
28 20 across plus 18 down
30 Mean of 24 across and 23 across
31 34 up divided by 13 down
33 Half of 35 across, then subtract 36 up
35 40 across plus 1 down
38 Fourteen times a prime number
40 45 across minus 13 down
42 Mean of 16 across and 16 down
45 48 across minus 33 across
48 30 across plus 32 down
51 14 up minus 19 up
53 Twice the result of 38 across plus 10 down

Up

5 Two-thirds of 46 up
8 Mean of 37 down and 29 up
10 1 down plus 51 across
13 22 up minus 24 across
14 Mean of 13 down and 52 down
19 Mean of 24 up and 10 up
21 Mean of 43 down and 29 up
22 10 up plus 41 down
24 A square
25 44 up minus 7 across
27 A prime number
29 8 down plus 16 down
34 Mean of 45 up and 18 down
36 39 down minus 24 across
39 41 down plus 18 down
43 17 down plus 33 across
44 39 down times 9 across
45 18 down times 40 across
46 36 up plus 39 up
47 54 up minus 21 across
49 Eighty-three times 45 across
50 14 up plus 1 down
54 Mean of 35 across and 20 across
55 A prime number

Down

1 37 down divided by five
2 9 across times 21 across
3 Mean of 45 up and 24 up
6 Its digits total 8 down
8 47 up minus 31 down
10 22 up minus 21 across
11 9 across minus 48 across
13 20 across minus 11 down
14 Twice a square
16 46 down minus 8 up
17 9 across minus 52 down
18 50 up minus 32 down
27 Six times a prime number
29 Four times 45 across
31 Mean of 31 across and 15 across
32 Twice the result of 48 across minus 4 across
34 14 down minus 43 up
37 45 across minus 15 across
39 8 down plus 21 across
41 35 across minus 39 up
43 A prime number
44 A square
46 3 down plus 39 down
52 45 across minus half of 11 down

Solution:

