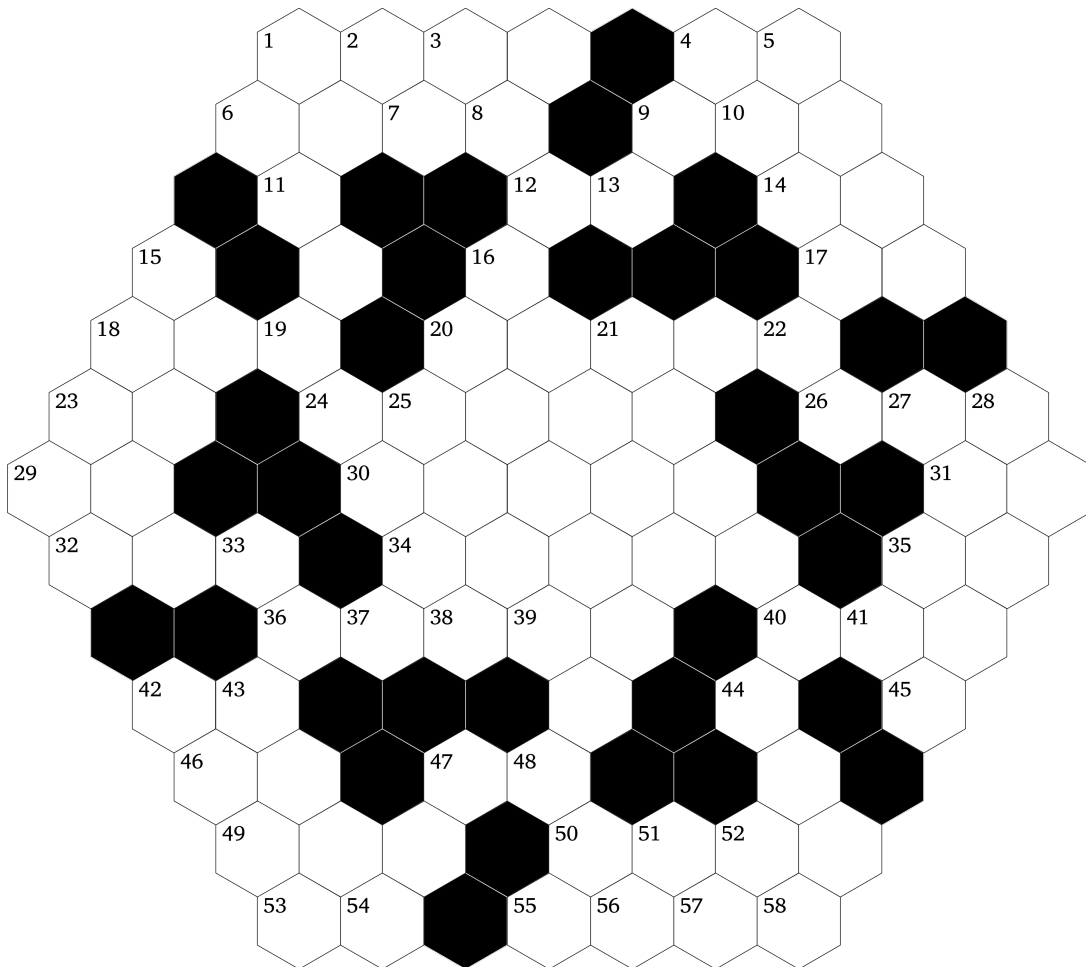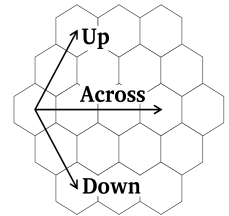# TripleCross - Challenging Puzzle #26

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 Fifty-four times a prime number
4 31 across divided by three
6 Three times a prime number
9 44 up plus 3 down
12 18 down minus 33 down
14 Mean of 46 across and 41 down
17 Mean of 48 down and 2 down
18 46 up plus 58 up
20 45 up times 29 down
23 33 down minus 15 down
24 Eight hundred sixty-four less than 30 up
26 18 down plus 19 up
29 8 up minus 42 across
30 One thousand four hundred thirty-two more than 24 across
31 A square
32 49 across minus 6 up
34 Thirty-four times a prime number
35 12 across plus 15 down
36 Seventy-four times a prime number
40 Nine times a prime number
42 Mean of 46 across and 41 down
46 Twice the result of 29 across plus 23 across
47 A square
49 22 up minus 49 up
50 29 down plus 29 up
53 6 up minus 29 across
55 A prime number

Up

6 A square
7 Mean of 18 down and 6 up
8 35 down plus 15 down
10 6 up reversed
11 13 up plus 32 across
13 18 down plus 6 down
14 A square
19 55 up minus 23 across
22 57 up minus 8 up
29 50 across minus 28 down
30 Nine thousand one hundred ninety-nine more than 25 down
32 A prime number
37 Its digits total 58 up
38 Forty-six times 13 up
39 Three times a prime number
41 42 down minus 23 down
44 48 down minus 19 up
45 Seventy-one times 41 down
46 Twice the result of 39 up minus 16 down
48 Ninety times a prime number
49 A square
53 57 up divided by 22 down
54 23 down minus 56 up
55 A square
56 17 across minus 47 across
57 35 down times 29 across
58 14 across minus 33 down

Down

1 Mean of 44 up and 7 up
2 7 up reversed
3 33 down times 4 across
4 Seven times a prime number
5 A prime number
6 11 up minus 22 up
15 9 across divided by 12 across
16 Nineteen times a prime number
18 22 up minus 32 across
19 30 across minus half of 8 up
20 First two digits are the same as 52 down
21 Nine times a prime number
22 Mean of 14 across and 15 down
23 53 across plus 54 up
25 Mean of 20 down and 53 across
27 44 down minus half of 54 up
28 20 across divided by 45 up
29 Twice the result of 17 across minus 14 across
33 26 across minus 2 down
35 46 across minus 12 across
41 44 up plus 51 down
42 A prime number
43 Consecutive digits in descending order
44 Mean of 11 up and 52 down
48 53 up plus 8 up
51 Sum of digits in 21 down
52 Seven times 53 up

Solution: