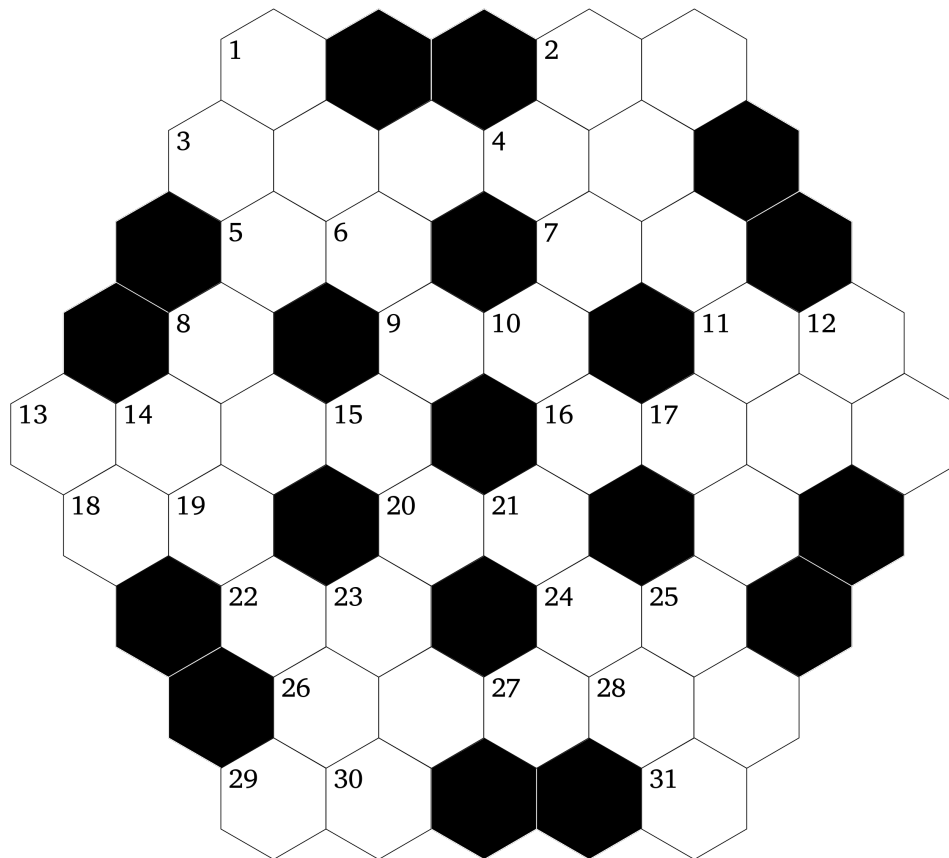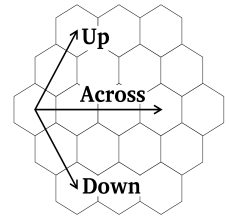# TripleCross - Challenging Puzzle #35

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 Two-thirds of 6 up
3 Twice the result of 14 down plus 18 across
5 Mean of 29 across and 15 down
7 21 up minus 10 down
9 4 up minus half of 7 across
11 Twice the result of 10 up minus 13 across
13 Five times a prime number
16 Forty-two times a prime number
18 Mean of 21 up and 22 across
20 A square
22 8 down plus half of 30 up
24 6 up minus 9 across
26 A prime number
29 A square

Up

3 Mean of 27 up and 17 down
4 Mean of 19 up and 29 across
6 Mean of 20 across and 15 up
10 Twelve times a prime number
15 12 down minus 25 down
17 18 across minus 30 up
18 First two digits are the same as first two digits of 21 down
19 12 down minus 29 across
21 20 across plus 19 up
27 22 across minus 8 down
28 Sixteen times a prime number
29 Six times a prime number
30 20 across plus 24 across
31 Mean of 17 up and 25 down

Down

1 Seven times a prime number
2 Last two digits are the same as 29 across
3 Two-thirds of 6 up
4 15 up minus 23 down
8 7 across plus 19 up
10 Same as 13 down
12 21 up minus 24 across
13 9 across plus 6 up
14 Eight times a prime number
15 18 across minus 4 down
17 30 up minus 3 up
21 Two hundred fifty-three less than 16 across
23 19 up minus 9 across
25 Mean of 24 across and 15 up

Solution: