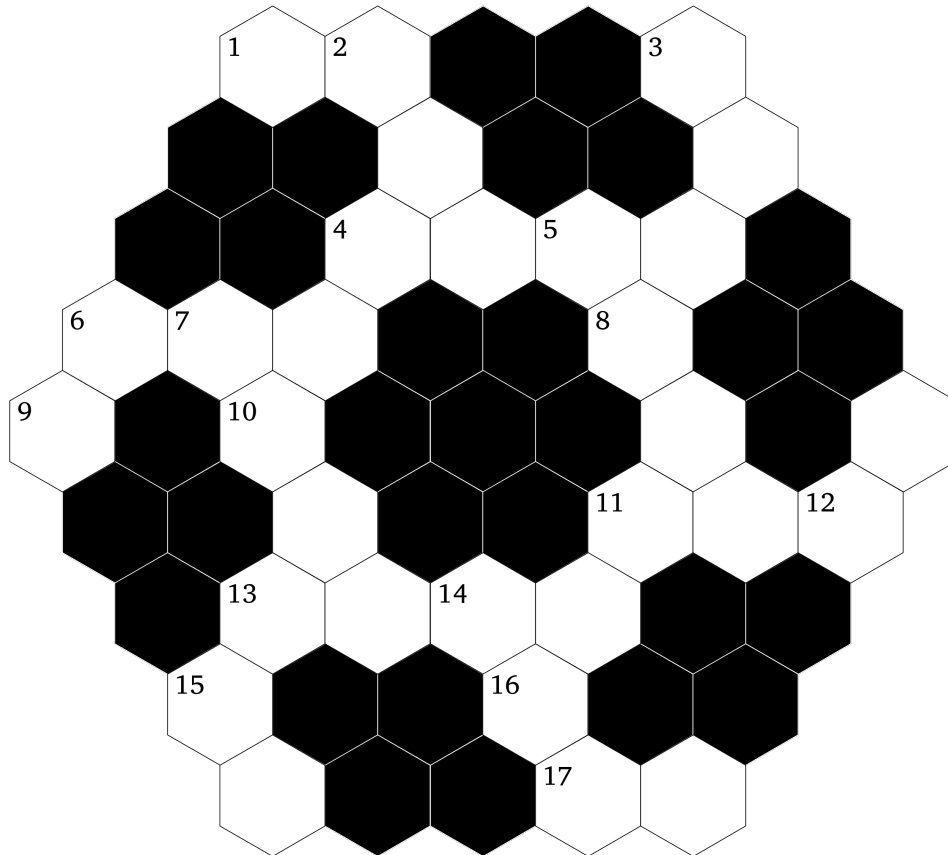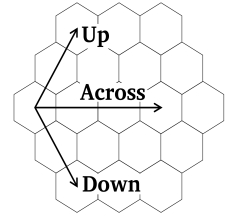Difficulty: ★☆☆☆☆

TripleCross - Intermediate Puzzle #31

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 17 across minus half of 12 up
4 5 down minus half of 2 down
6 Nine times a prime number
11 A prime number
13 Thirty-one times a prime number
17 Twice a prime number

Up

8 Eighty-nine less than 2 down
9 Sum of digits in 15 down
10 One thousand two hundred forty-eight more than 5 down
12 15 up divided by nine
15 Twice a square
16 15 up plus 14 down

Down

2 Twice a prime number
3 A prime number
5 Four times a prime number
7 6 across times 3 down
14 Forty-seven times 9 up
15 A prime number

Solution:

Intermediate-31