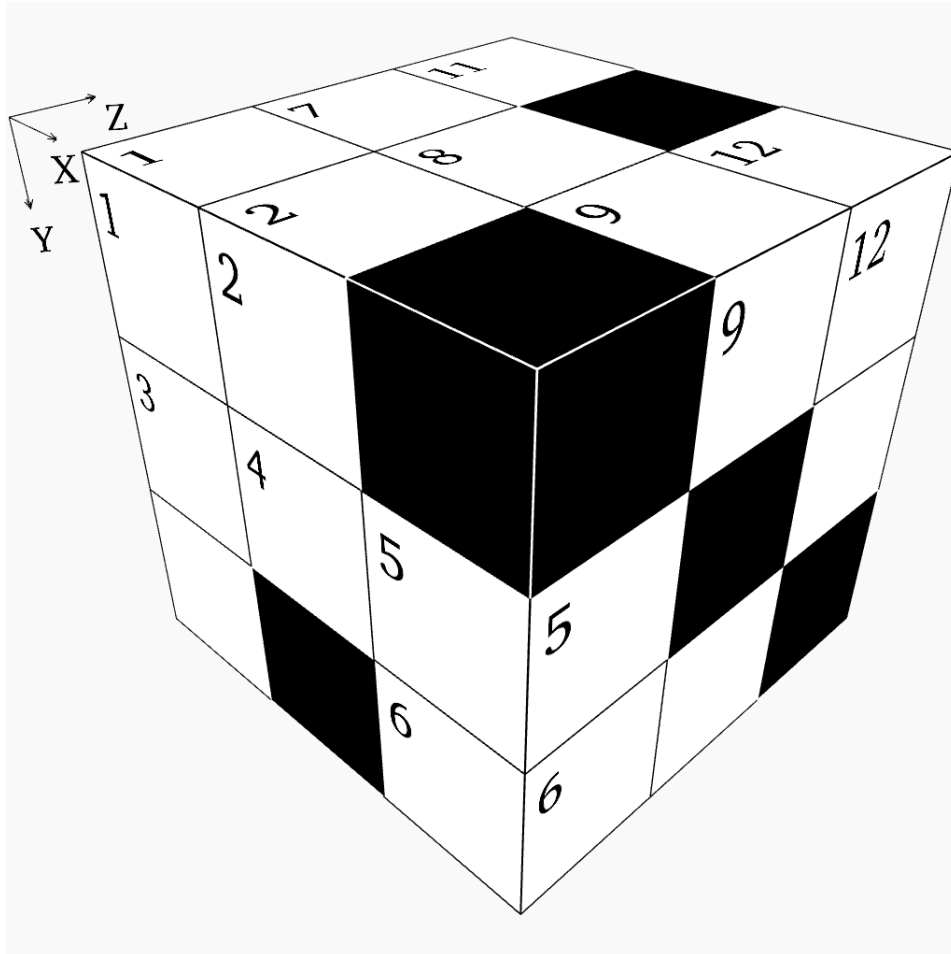


Cube - Intermediate Puzzle #36



This puzzle is like a crossword, but with numbers. Each digit occupies a 3D block and can be a part of a "word" in the X,Y, and Z directions.

Rules:

1. "Words" may not start with a zero.
2. "Words" in the X direction read from left to right.
3. "Words" in the Y direction read from top to bottom.
4. "Words" in the Z direction read from front to back.
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.

If we take the cube pictured above and divide it into individual X-Y layers, we will get these planes:

1	2		7	8	9	11		12
3	4	5	10					
		6				13		

X Direction

- 1 X10 minus Y12
- 3 Three times a prime number
- 7 Five times Y5
- 10 Y11 minus Z9
- 13 Twice a prime number

Y Direction

- 1 Y8 plus half of Y7
- 2 Z4 minus half of X13
- 5 Mean of Y11 and X1
- 7 Two-thirds of Z9
- 8 Mean of X1 and X3
- 11 Y2 plus X10
- 12 A prime number

Z Direction

- 1 A prime number
- 2 X3 divided by three
- 3 X10 plus Z6
- 4 X13 plus Y7
- 6 X3 minus Y5
- 9 Mean of Z4 and X13

Solution:

1	5	■	3	9	5	1	■	7
1	7	7	8	6	■	4	■	1
5	■	9	■	■	8	3	8	■