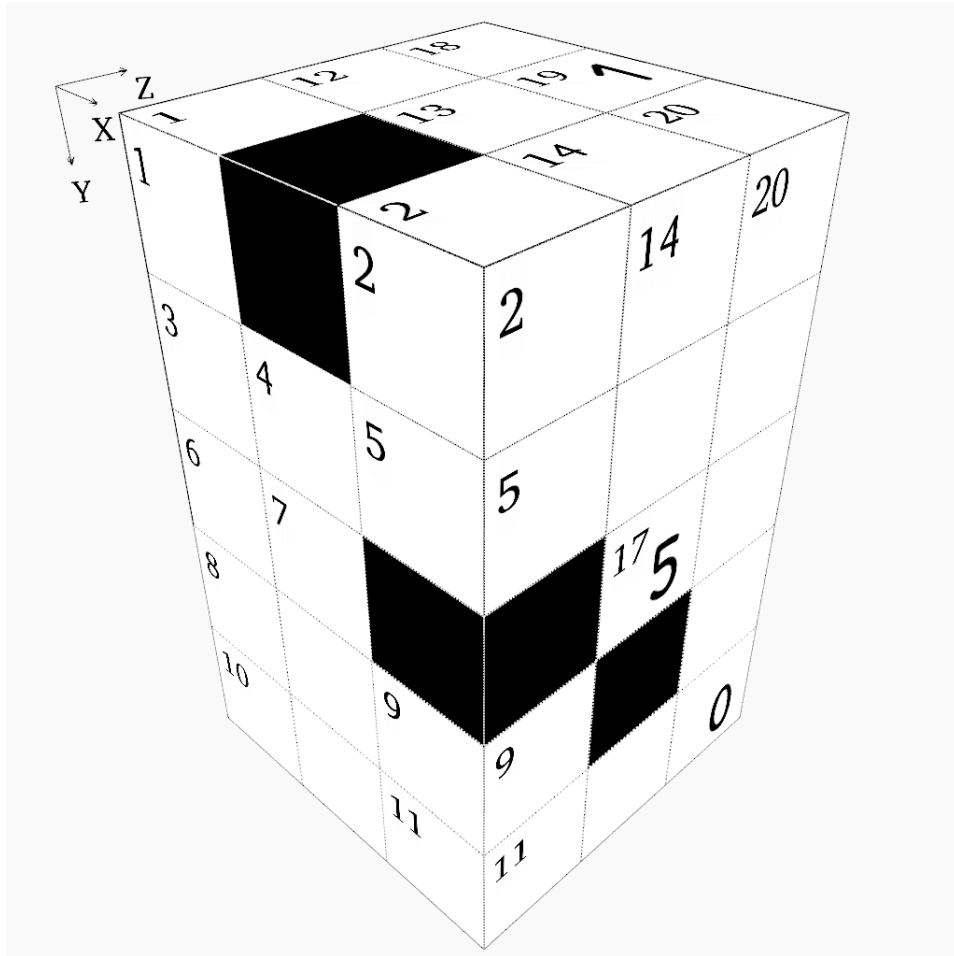


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #3



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 box pictured above and divide it into individual X-Y layers, we will get these planes:

1		2	12	13	14	18	19	20
3	4	5	15			21		
6	7		16		17	22		
8		9	2					
10		11					23	0

X Direction

- 3 Z13 plus Z3
- 6 X21 minus X23
- 8 Five times a prime number
- 10 X18 minus Z5
- 12 Y1 divided by Y13
- 15 Fourteen times a prime number
- 16 Thirteen times a square
- 18 Last two digits are the same as last two digits of Z3
- 21 A prime number
- 22 Twice the result of Z4 plus Y2
- 23 Y19 minus Z17

Y Direction

- 1 X12 times X15
- 2 X6 minus Z13
- 4 Half of Y18, then subtract Z5
- 9 Y18 divided by eighty-nine
- 12 Z17 times Y9
- 13 Same as X15
- 14 A square
- 18 Fifty-eight times a prime number
- 19 Mean of X8 and X6
- 20 Consecutive digits unordered

Z Direction

- 1 Five times a prime number
- 2 X18 minus X23
- 3 Nine times a prime number
- 4 Fifty-seven more than Z5
- 5 Mean of Z7 and Z8
- 6 X18 plus half of X23
- 7 Two-fifths of Z11
- 8 Twice a prime number
- 11 Fifteen times Z17
- 13 A prime number
- 17 Mean of X23 and Y9

Solution:

5		4	3	1	6	5	1	1
7	2	2	1	8	2	1	0	3
5	3		3	2	5	6	4	4
1	5	5	2			2		2
2	8	8			1		5	0