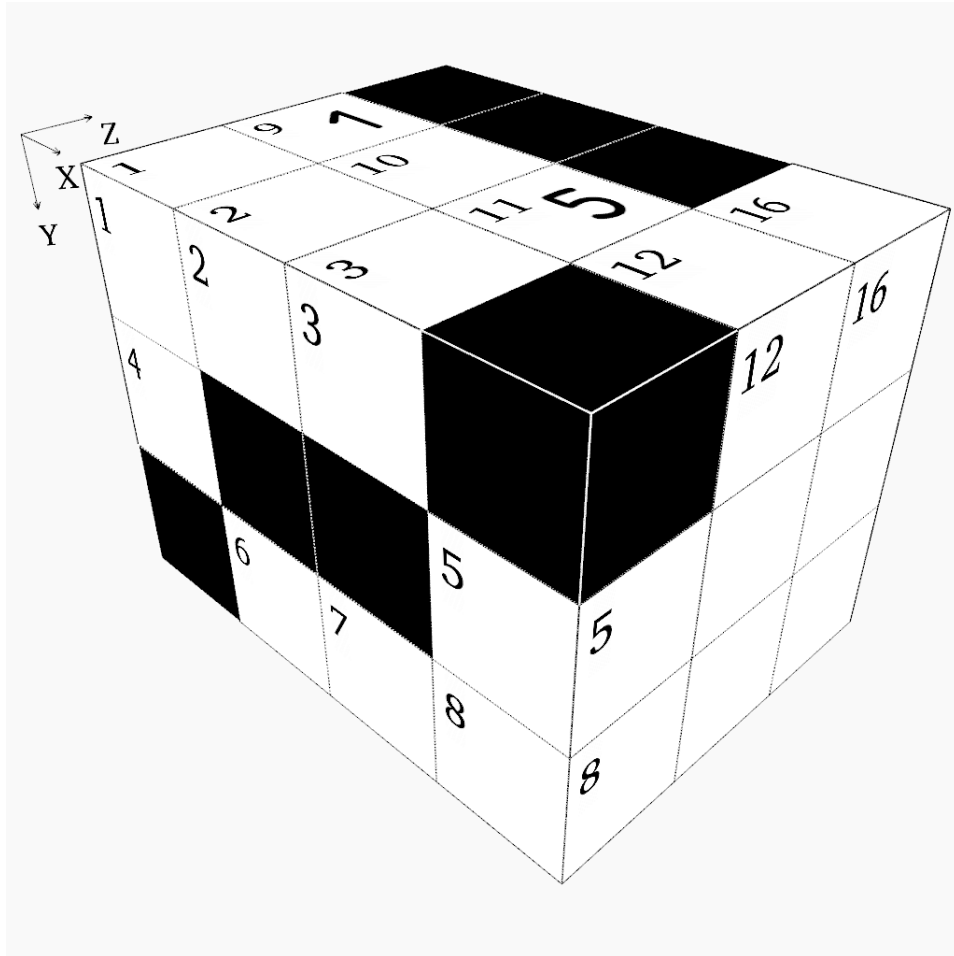


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #18



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	3		9	10	11	12				16
				1		5					
4			5	13		14		17		18	
								3			
	6	7	8		15			19			
					8						

X Direction

- 1 A prime number
- 6 Mean of Y16 and Y5
- 9 X15 plus half of Z8
- 13 Y10 plus Y12
- 15 Twenty-three times a prime number
- 18 Z14 reversed
- 19 X9 minus Y18

Y Direction

- 1 X15 divided by Y18
- 5 Consecutive digits in descending order
- 9 A prime number
- 10 Three times a square
- 11 Mean of Z2 and X9
- 12 A prime number
- 16 A square
- 17 Mean of Z1 and Z2
- 18 Z4 divided by Z1

Z Direction

- 1 Same as Y17
- 2 Z4 divided by Y18
- 3 Z12 minus Y5
- 4 Y18 times Y17
- 5 Eighty-six more than Z4
- 6 Mean of X1 and Z2
- 7 A prime number
- 8 Fifty-six times Y9
- 12 Seven times a prime number
- 14 Twice the result of Y17 plus Z3

Solution:

3	3	1		1	1	5	9				1
7			7	1	0	9	9	3		2	9
	1	3	6		8	5	1	1	1	3	6