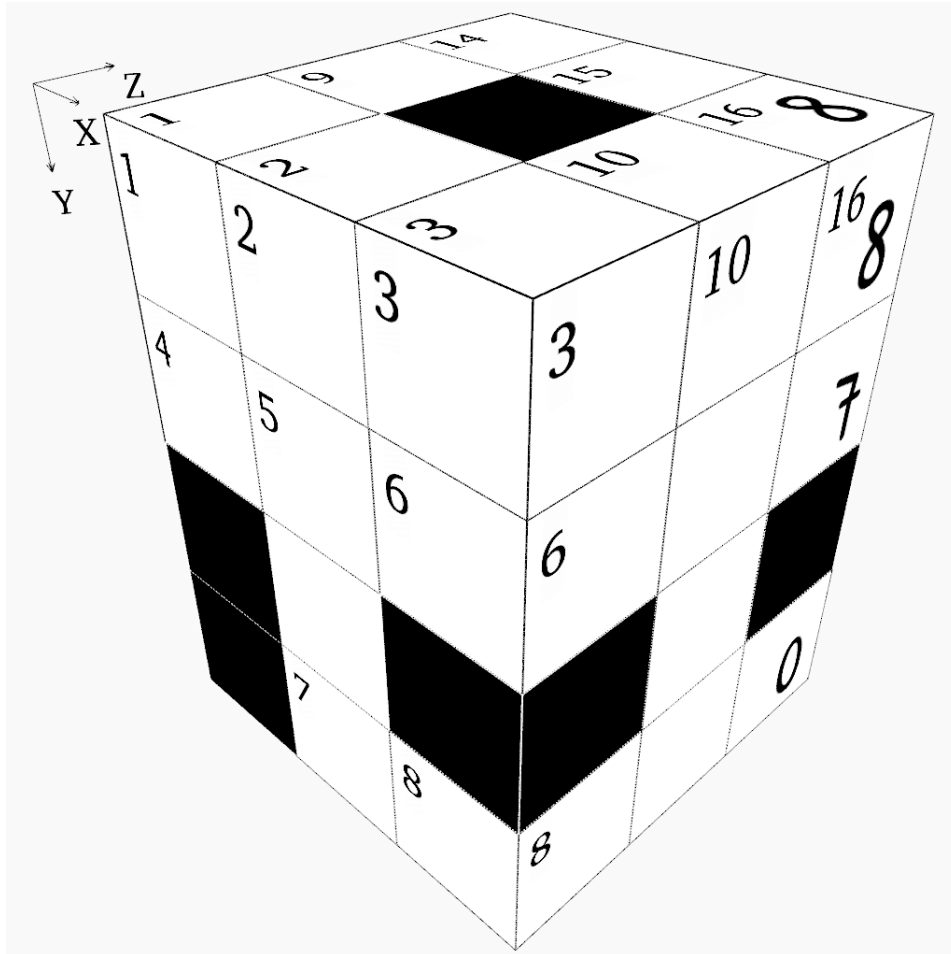


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #15



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	14	15	16
								8
4	5	6	11			17		7
			12			18		
	7	8	13			9		0

X Direction

- 1 A prime number
- 4 Mean of Z6 and X1
- 7 A prime number
- 11 A square
- 13 X18 plus Y16
- 14 Twice a prime number
- 17 Nine times a prime number
- 18 Twelve times a prime number

Y Direction

- 1 Z3 divided by fifty-seven
- 2 Mean of Y14 and Y10
- 3 All digits are the same
- 9 A prime number
- 10 Y2 minus Z12
- 14 Y2 plus Z12
- 15 Z4 plus half of Z5
- 16 Consecutive digits in descending order

Z Direction

- 1 Z8 minus X7
- 3 Forty-two times Z13
- 4 Twenty-seven times a prime number
- 5 One hundred twenty-four more than Z3
- 6 A prime number
- 7 Z8 divided by five
- 8 Ten times a prime number
- 12 A square
- 13 A prime number

Solution:

1	9	7	3		9	9	9	8
4	9	7	5	2	9	9	2	7
	5		1		3	6	0	
	3	1	1	4	7	9		0