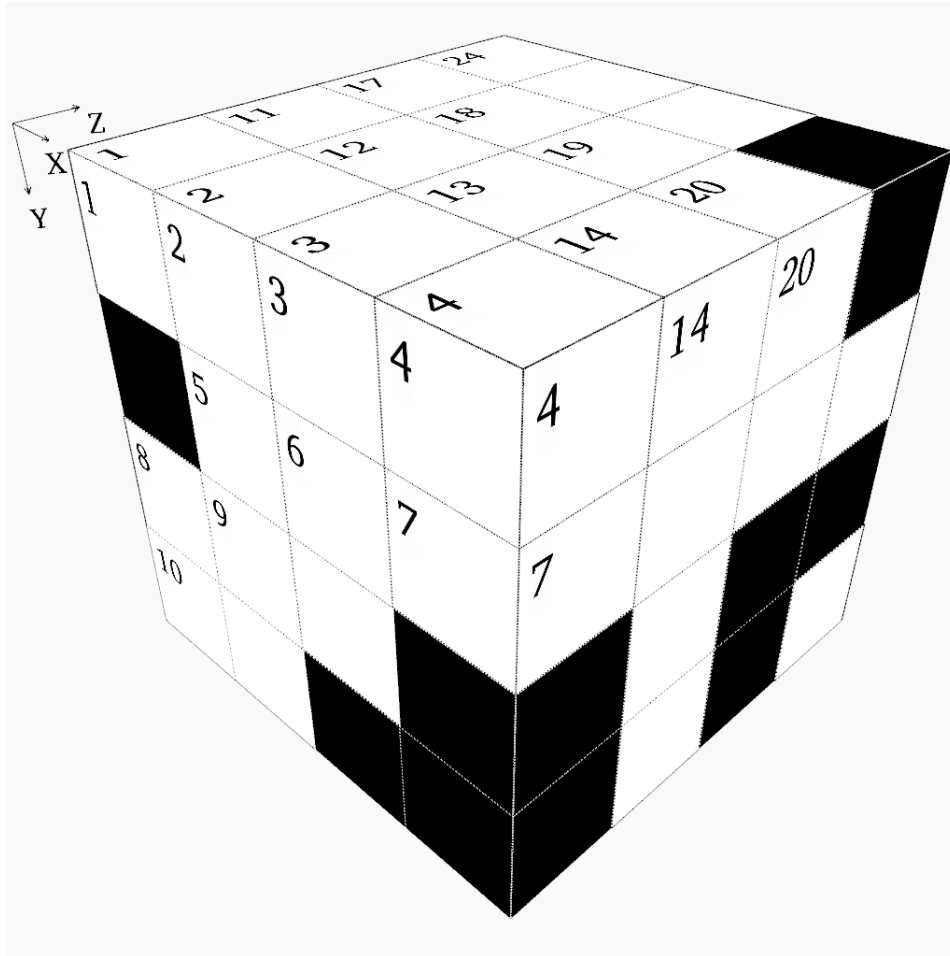


Difficulty: ★★☆☆☆

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

1	2	3	4	11	12	13	14	17	18	19	20	24				
	5	6	7	15				21								
8	9			16				22				25	26	27		
10										23		28				

X Direction

- 1 Y17 minus Y8
- 5 Seven times a square
- 8 X17 minus Y2
- 10 X24 divided by Y13
- 11 Mean of Y24 and Z23
- 15 Nine hundred twenty-one less than Y24
- 16 Square root of Z6
- 17 Five hundred twenty-one less than Y24
- 21 Three hundred four less than X17
- 22 Two-fifths of Z5
- 24 Y19 times X10
- 25 Fourteen times a square
- 28 A prime number

Y Direction

- 2 Twice a prime number
- 3 Forty-three times X16
- 4 Z9 divided by fifty-four
- 8 Y26 minus Y27
- 11 Mean of X15 and X25
- 12 Y18 plus X25
- 13 Mean of X22 and X16
- 14 Twice the result of Z8 plus Z9
- 17 X10 plus X1
- 18 Eighteen times a prime number
- 19 Same as Y13
- 20 Seven times X16
- 24 Three hundred seventy more than Z1
- 26 A prime number
- 27 X22 reversed

Z Direction

- 1 Mean of X1 and X21
- 2 Y27 plus Y24
- 3 Twenty-four times a prime number
- 4 Twenty-eight less than Y3
- 5 Ten times a prime number
- 6 A square
- 7 Three times a prime number
- 8 Thirty-four times a square
- 9 Y20 times Z23
- 10 Z7 minus half of Z6
- 15 Twice a prime number
- 23 A cube

Solution:

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