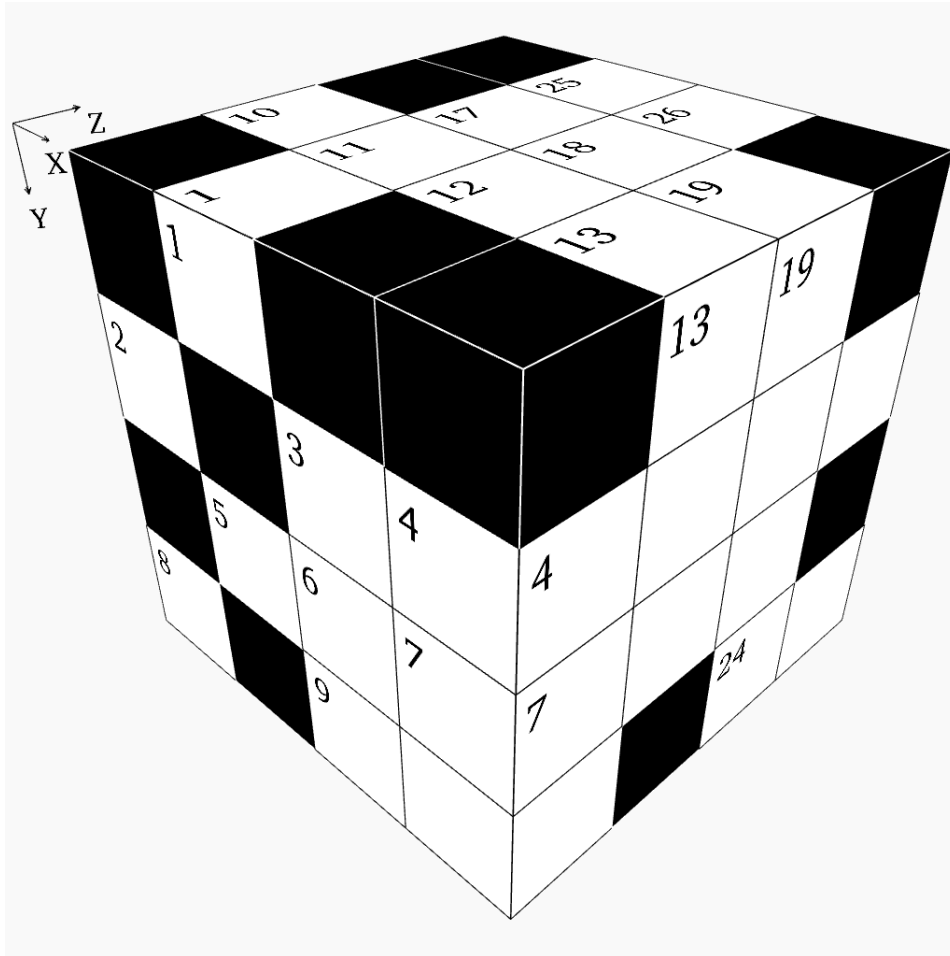


Difficulty: ★★☆☆☆

Cube - Challenging Puzzle #26



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			10	11	12	13		17	18	19		25	26	
2		3	4	14	15			20				27		28	
	5	6	7	16						21		29	30		
8		9						22	23		24	31			

X Direction

- 3 Same as Z15
- 5 Six times a prime number
- 9 Y11 divided by three
- 10 X22 minus Y26
- 14 Seventy-two times a prime number
- 16 Eight hundred sixty-five more than X22
- 17 A prime number
- 20 Mean of Y18 and X21
- 21 X9 reversed
- 22 Twenty-one times a prime number
- 25 X9 plus X28
- 28 A square
- 29 Mean of X5 and Y4
- 31 Mean of Y12 and X3

Y Direction

- 3 Rearranged digits of Y11
- 4 Y17 plus Y3
- 10 Half of Z8, then subtract Y19
- 11 A square
- 12 Fifty-two times a prime number
- 13 Eleven times X21
- 17 Mean of X21 and Z5
- 18 Three hundred ninety-four less than Z8
- 19 Seventeen times X25
- 20 Half of Z7, then subtract Y17
- 26 Ten times a prime number
- 27 One hundred fifteen less than Z12
- 30 Three times a prime number

Z Direction

- 1 Twenty-one times a prime number
- 2 Mean of X16 and Y3
- 3 Thirty-two times a prime number
- 4 Z1 plus Z24
- 5 A square
- 6 A prime number
- 7 Four times a prime number
- 8 Twenty-two times a prime number
- 9 Fifty-two times Z24
- 12 Three-fifths of Z16
- 13 Seven times a prime number
- 15 Y13 divided by twenty-one
- 16 One hundred eighty-four more than X17
- 23 Same as Y30
- 24 X31 divided by thirty

Solution:

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