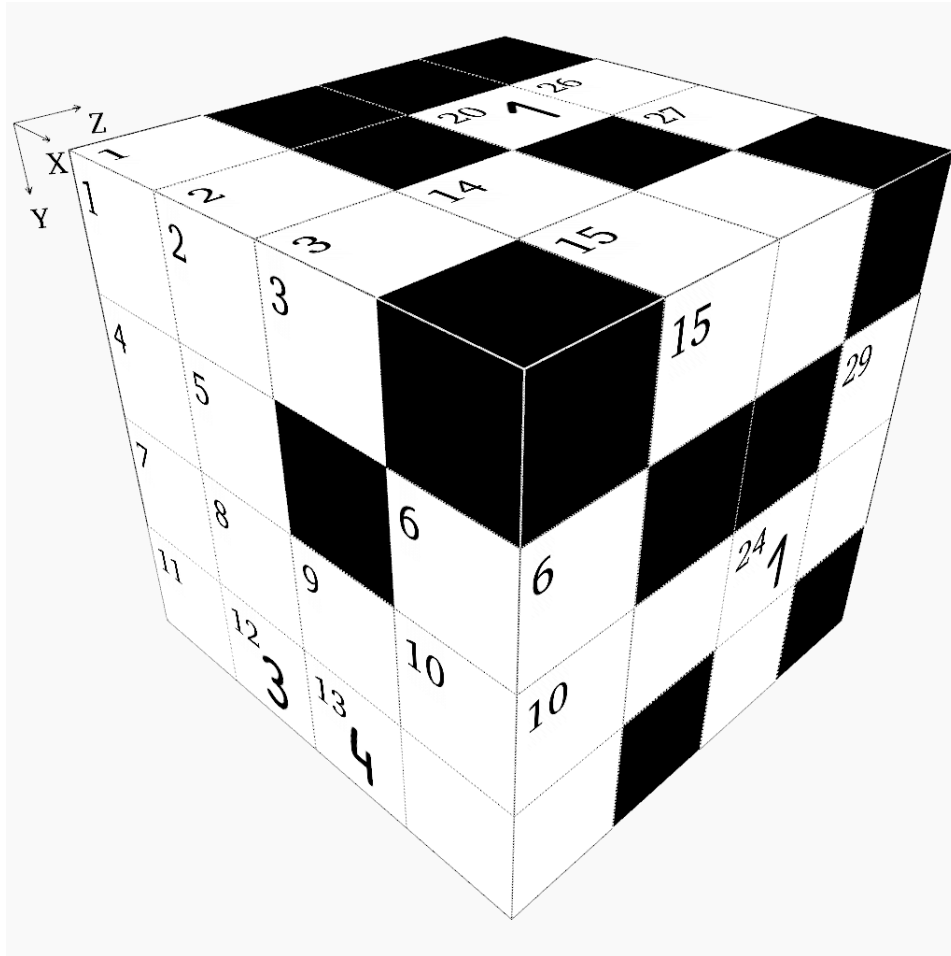


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #33



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				14	15		20	1				26	27	
4	5		6			16	17	9	21	0	22			28	2	29
7	8	9	10			18				23	7		24	30		1
11	12	3	4			19				25				31	1	9

X Direction

- 1 A prime number
- 4 X26 plus Z15
- 7 Seventy-seven times a square
- 11 Two hundred twenty-two less than Z11
- 14 X19 divided by eighteen
- 16 X26 minus Z20
- 18 Eleven times a prime number
- 19 Y24 times X26
- 21 Twice the result of Y20 minus Y6
- 23 A prime number
- 25 Nine times a prime number
- 26 Y18 reversed
- 28 Six times a prime number
- 30 Y2 minus Y22
- 31 Three times a prime number

Y Direction

- 1 Thirteen times a prime number
- 2 Thirty-one times a prime number
- 6 Fifty-eight times Z20
- 9 Y18 minus Y24
- 14 X14 plus Z12
- 16 Twenty-nine times Y24
- 18 X26 reversed
- 20 Twenty-nine times a prime number
- 22 Thirty-two times a prime number
- 24 Z3 divided by three
- 26 A prime number
- 27 Sixty-one times a prime number
- 29 Mean of Y24 and X16
- 30 Twice a prime number

Z Direction

- 3 Same as X14
- 5 Twice a prime number
- 7 Z8 divided by Y9
- 8 Thirty-four times a square
- 9 Thirteen times a prime number
- 10 Y1 minus X26
- 11 Twice the result of Y27 minus Z15
- 12 Y14 minus Z3
- 13 A square
- 15 Y22 divided by sixteen
- 17 Eighty-eight times Y24
- 20 Three-fifths of Y29

Solution:

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