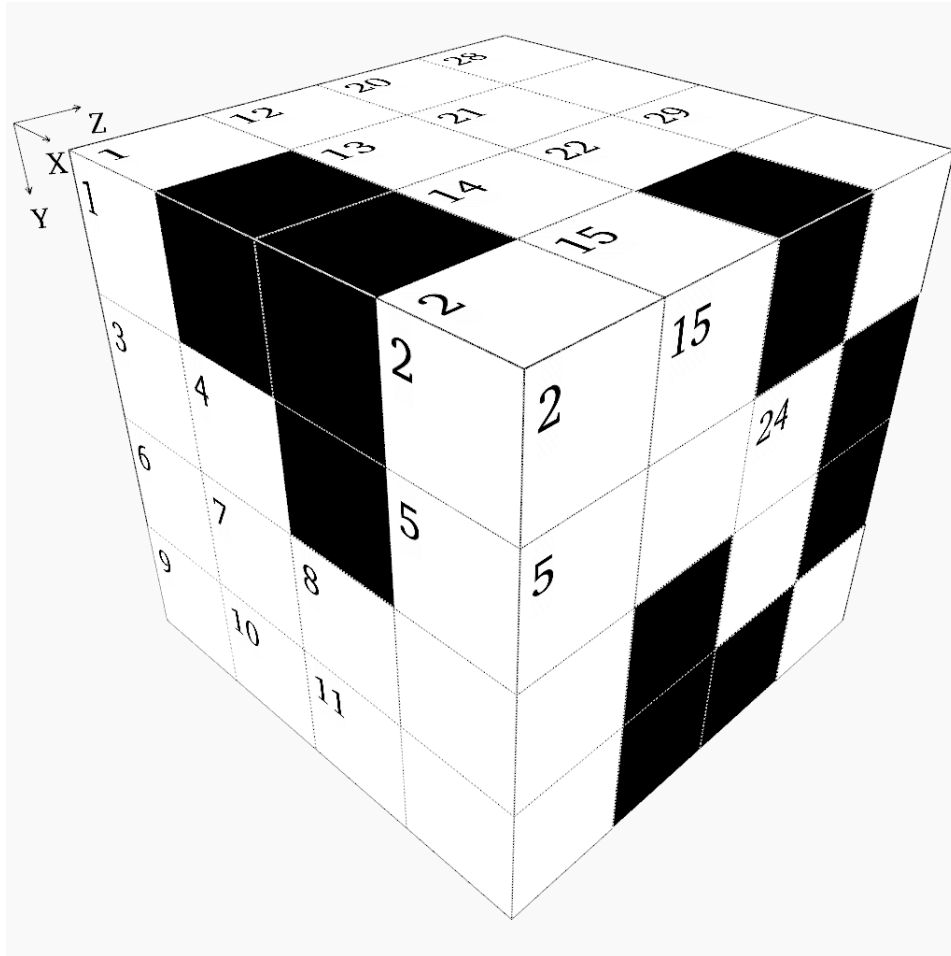


Difficulty: ★★☆☆☆

Cube - Challenging Puzzle #2



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

X Direction

- 3** A prime number
- 6** Twice a prime number
- 9** Sixty-eight times Y18
- 12** A prime number
- 16** Twice a prime number
- 18** Z7 divided by ten
- 19** Ten times Y14
- 20** A prime number
- 23** Sixteen times Z26
- 25** Half of X6, then subtract Y4
- 27** Twice the result of Z4 plus Z26
- 28** Six times a prime number
- 30** A palindrome

Y Direction

- 1** Twice the result of X9 plus Y15
- 2** Twice a prime number
- 4** X18 plus Z17
- 8** Z17 minus X19
- 13** Sixty-one times Y18
- 14** X30 divided by X23
- 15** A square
- 18** Y25 plus Y15
- 21** Half of Z11, then subtract X12
- 22** Twice the result of Y13 minus Z13
- 24** Y4 divided by eighteen
- 25** A square
- 28** Mean of Y2 and X28
- 29** Six times a prime number

Z Direction

- 1** Seventeen times a prime number
- 2** Same as X3
- 4** A prime number
- 5** Y24 times Y14
- 6** Fifteen times a prime number
- 7** Ten times Y8
- 9** Forty more than X30
- 10** Eighty-two times a prime number
- 11** Forty-six times a prime number
- 13** Fourteen times a prime number
- 14** X9 divided by eighteen
- 17** X19 plus X18
- 26** Y24 reversed

Solution:

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