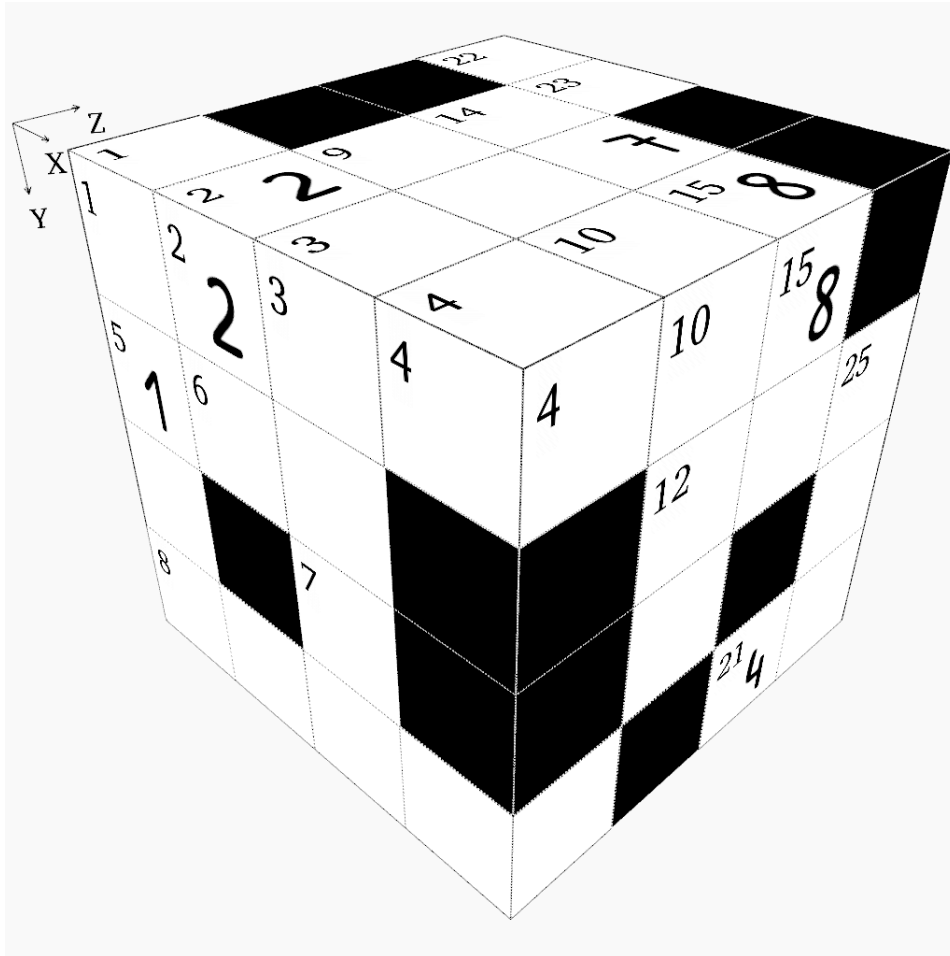


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #6



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

X Direction

- 1 A prime number
- 5 Nine times a prime number
- 8 Nine times a prime number
- 9 X18 divided by sixteen
- 11 Y14 divided by Y25
- 13 Eleven times a prime number
- 14 Twice a prime number
- 16 Mean of Y15 and X22
- 17 Z13 minus Z20
- 18 Y22 minus Z13
- 22 Mean of X11 and X5
- 24 X16 minus Z20
- 26 A prime number
- 28 Y1 minus X9

Y Direction

- 1 Fifty-seven times X22
- 2 A square
- 3 X24 plus X8
- 9 Three times a prime number
- 10 Y16 plus Z7
- 14 Eighty-seven times Z17
- 15 Mean of X5 and Y2
- 16 Thirteen times a prime number
- 22 Twice the result of X1 minus Y9
- 23 X11 plus Y10
- 25 X16 plus Z21
- 27 Twice Y2

Z Direction

- 2 Twenty-one times a square
- 3 All digits are the same
- 4 Y10 minus X9
- 5 Three times a prime number
- 6 X26 minus X5
- 7 Mean of X24 and Z19
- 8 Twice the result of Y23 plus Z2
- 12 Last two digits are the same as X22
- 13 A square
- 17 Y25 divided by three
- 19 One more than Y2
- 20 Twice the result of Y3 minus X8
- 21 X28 divided by ninety-six

Solution:

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