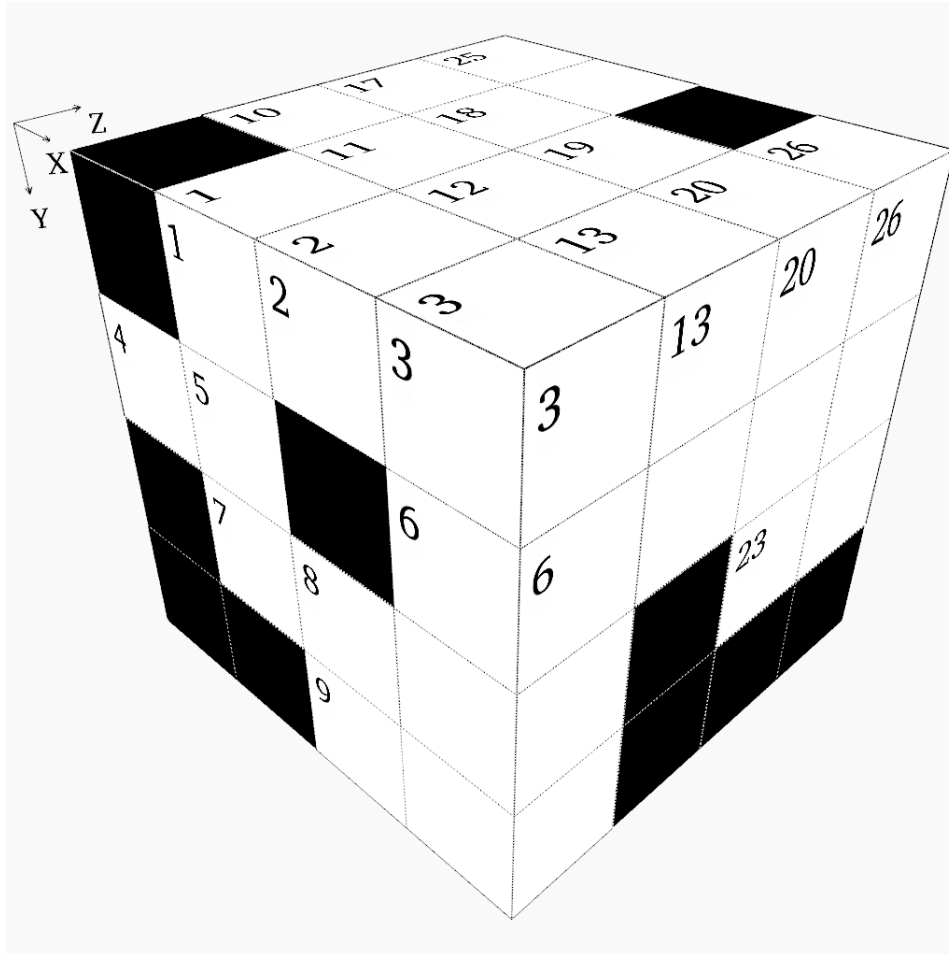


Difficulty: ★★☆☆☆

Cube - Challenging Puzzle #9



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

X Direction

- 1 X29 minus Y28
- 4 Y20 divided by thirteen
- 7 Half of X1, then subtract Z2
- 9 Y8 reversed
- 10 Forty-two times a prime number
- 14 Half of Y19, then subtract Z15
- 16 Rearranged digits of X29
- 17 Seventeen times Z24
- 21 Thirteen times a prime number
- 22 Z9 minus X28
- 25 X28 minus Y18
- 27 A prime number
- 28 Y25 plus Y18
- 29 Seven times a prime number

Y Direction

- 1 A prime number
- 3 Fifty-nine times a prime number
- 8 X9 reversed
- 10 Y12 divided by eight
- 11 A prime number
- 12 Z4 times Y20
- 13 Mean of Y22 and Z23
- 18 Z6 minus X17
- 19 Thirty-eight times a prime number
- 20 Eight times X9
- 22 A cube
- 25 Y26 minus X7
- 26 Z8 divided by forty-four
- 27 Mean of X29 and X25
- 28 Eight more than Y22

Z Direction

- 1 A prime number
- 2 Mean of Y27 and X9
- 3 Forty-six times Z16
- 4 Y10 divided by X9
- 5 X4 times Y25
- 6 Twenty-nine times a prime number
- 7 X22 minus Y11
- 8 Two hundred ninety-one less than Z1
- 9 A prime number
- 10 A prime number
- 15 Mean of Y26 and Z10
- 16 Y18 divided by four
- 23 A cube
- 24 A prime number

Solution:

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