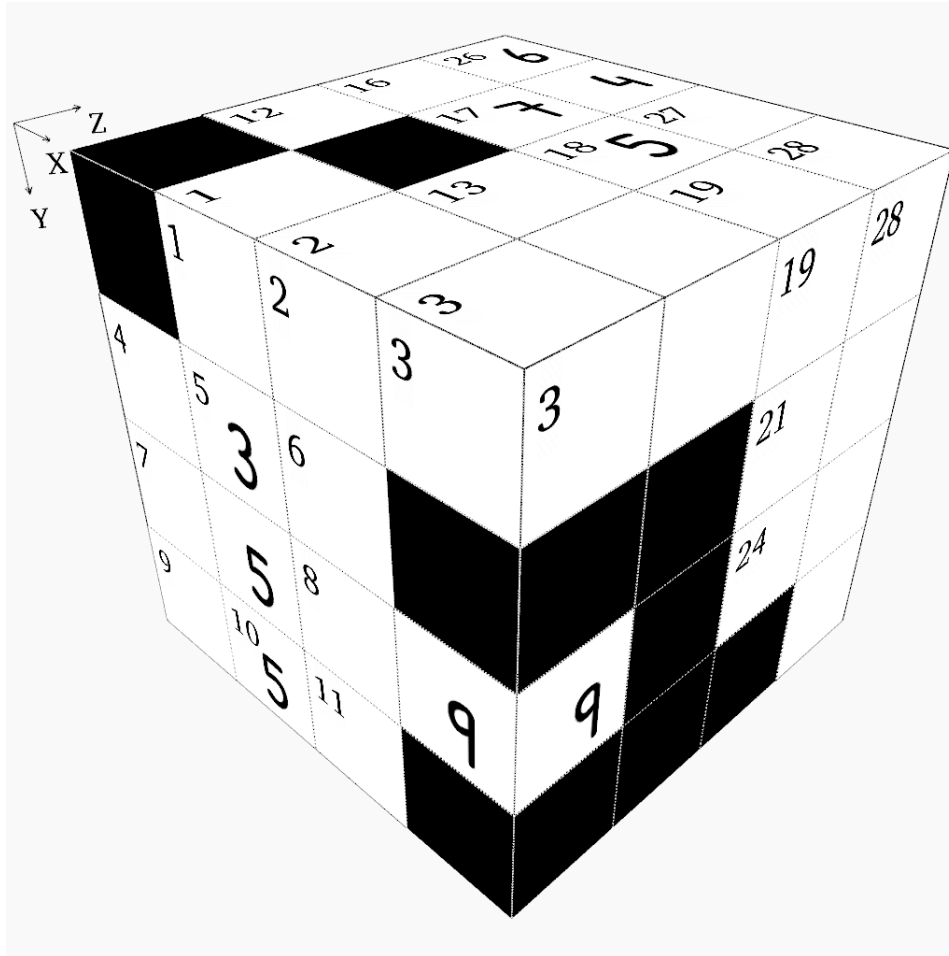


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #4



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		12		13		16	17	18	19	26		27	28
										7	5		6	4		
4	5	3			14	7		8	20	3		21			29	
7		5	8	9					22	23		24	30	31	0	
9	10	5			15				25				32	6	3	

X Direction

- 1 X13 plus Z22
- 4 Y30 plus X15
- 7 A square
- 9 X13 plus X25
- 13 Four times a prime number
- 14 Twice the result of Y1 minus Z12
- 15 Mean of Y1 and Z22
- 16 Sixteen times a prime number
- 20 Y19 times Y30
- 22 Four times a prime number
- 25 One hundred ninety-six more than X4
- 26 Eight times a prime number
- 29 Z22 divided by seven
- 30 Rearranged digits of Z3
- 32 Seven times a square

Y Direction

- 1 Y12 plus Z2
- 2 Fifteen times a prime number
- 4 Nineteen times a prime number
- 12 Y31 plus Z17
- 13 Seventeen times a square
- 16 Y28 plus half of X13
- 17 A prime number
- 18 Fifteen times a prime number
- 19 Three times Z17
- 27 Ten times a square
- 28 A prime number
- 30 A square
- 31 Same as Z21

Z Direction

- 2 Z11 plus X15
- 3 Mean of Y2 and Z22
- 4 A prime number
- 5 Five times a prime number
- 6 A prime number
- 8 X7 minus Y4
- 9 Two thousand two hundred twenty-seven more than X7
- 10 A prime number
- 11 Five times a prime number
- 12 X30 minus Y19
- 17 Twice the result of Y27 minus Z4
- 21 Y12 minus Z17
- 22 Z24 plus X32
- 23 Twice the result of X22 minus Z6
- 24 Z23 reversed

Solution:

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