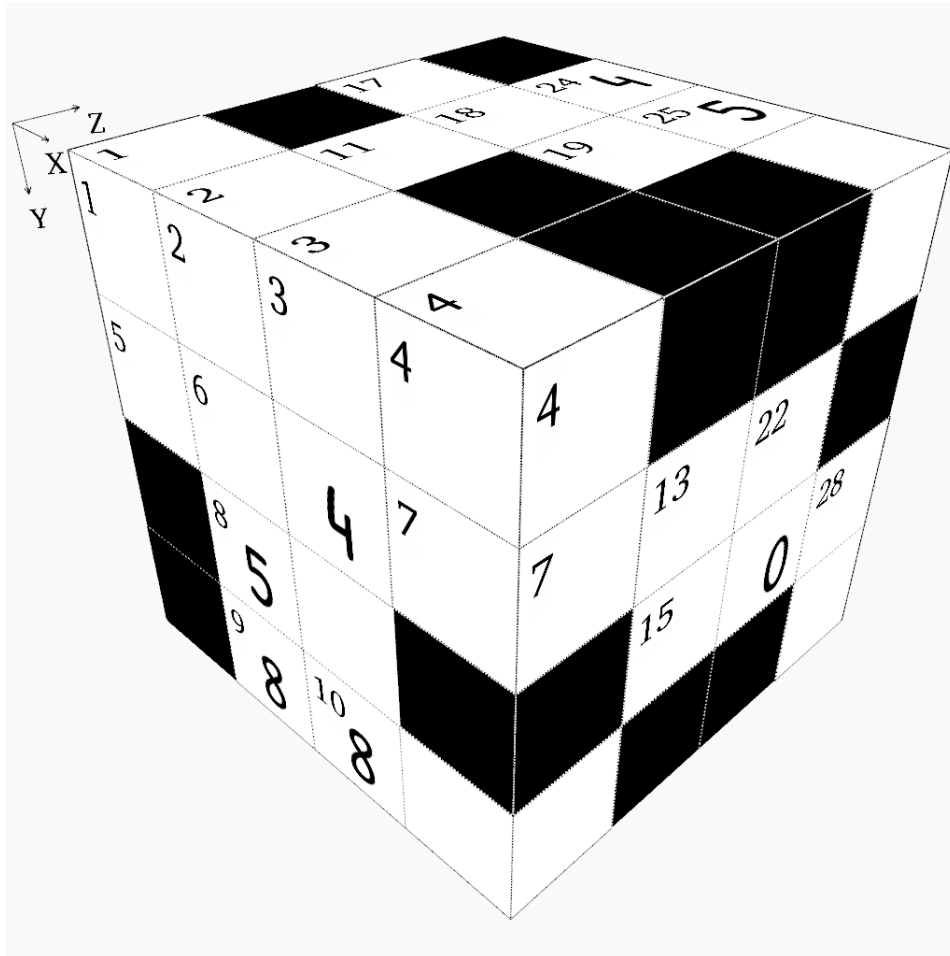


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #17



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		11			17	18	19			24	25	
5	6	4	7	12	4		13	20	1	21	22	26	5	4	
	8	5		14	6	1	15	4		23	0	27			28
	9	8	10	16	5			2				29	0		

X Direction

- 1 Twice the result of Y2 minus Y18
- 5 Rearranged digits of Z5
- 8 A prime number
- 9 Twelve times X27
- 12 Y19 minus X5
- 14 Mean of X27 and Y1
- 16 Mean of X17 and X26
- 17 Seven times X27
- 20 Six times a square
- 23 Nine times Y18
- 24 Seven times Y4
- 26 Forty-one times Z21
- 27 X12 plus Y28
- 29 Thirty-four times a prime number

Y Direction

- 1 Y19 minus X5
- 2 Z10 divided by four
- 3 X1 plus Y17
- 4 Z21 plus Z8
- 11 Seventy-eight times a prime number
- 12 X17 minus X8
- 13 Y26 minus Z7
- 17 Twice the result of X29 minus X24
- 18 Y12 minus X24
- 19 Three times a prime number
- 22 Mean of Y28 and Y25
- 24 Sixty times a prime number
- 25 Three-fifths of X23
- 26 Z14 minus X27
- 28 X20 divided by Y13

Z Direction

- 2 Mean of Y24 and X9
- 5 Ninety-nine times Z19
- 6 Thirteen times a prime number
- 7 X26 minus Y22
- 8 X14 minus Y18
- 9 Y18 plus X27
- 10 Four hundred thirty-nine more than Y19
- 14 A prime number
- 15 Z21 plus X9
- 16 X26 minus Z8
- 19 Five times a prime number
- 21 Y25 minus Y22

Solution:

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