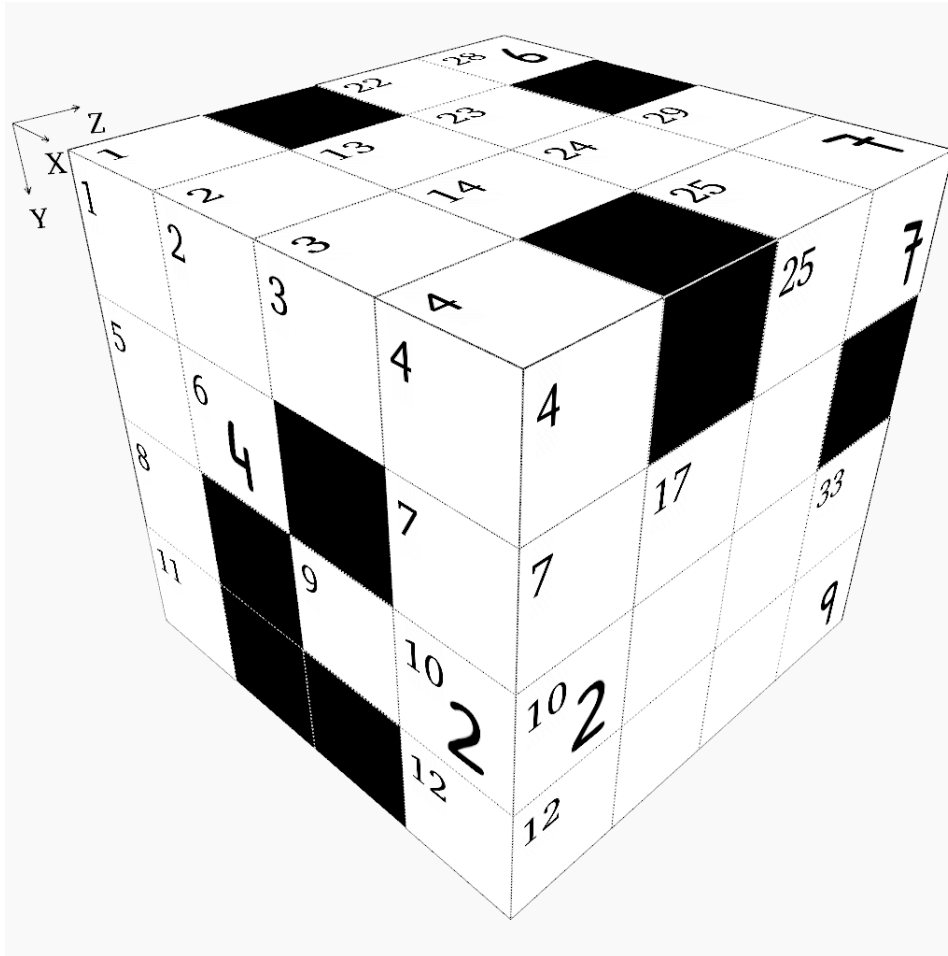


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #18



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		13	14		22	23	24	25	28	6		29	7	
5	6	4		7	15	1	16	8	17			26					
8			9	10	2	18	19			27					32	0	33
11				12	20	21									34		9

X Direction

- 1 One thousand ten less than Y28
- 5 A square
- 9 Z19 divided by twenty
- 13 A square
- 15 Twice a prime number
- 18 Twice the result of Z3 plus Y4
- 20 Z11 reversed
- 22 Y23 minus X34
- 26 Five times X13
- 27 A square
- 29 A cube
- 30 Z11 squared
- 32 Mean of Z6 and X27
- 34 Seven times a prime number

Y Direction

- 1 Y29 plus Y4
- 2 Twice Z25
- 4 Seventy-one times Z25
- 13 Twice a prime number
- 14 Thirteen times Z25
- 15 Eleven times a prime number
- 17 Z2 minus Y24
- 23 Fifty-four times a prime number
- 24 Twice a prime number
- 25 Y29 plus half of X5
- 28 Rearranged digits of Y4
- 29 Five times a prime number
- 31 Z19 minus Z25
- 33 A prime number

Z Direction

- 2 A prime number
- 3 Seventy-eight times a prime number
- 5 X20 minus Z9
- 6 Consecutive digits unordered
- 7 Sixty times Z9
- 8 Mean of X1 and X9
- 9 Y15 divided by seventeen
- 10 Twenty-eight times a prime number
- 11 A cube
- 12 Three times a prime number
- 16 A prime number
- 19 Three-fourths of X26
- 21 Y15 plus half of X20
- 22 Z7 divided by ten
- 25 X27 minus Z11

Solution:

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