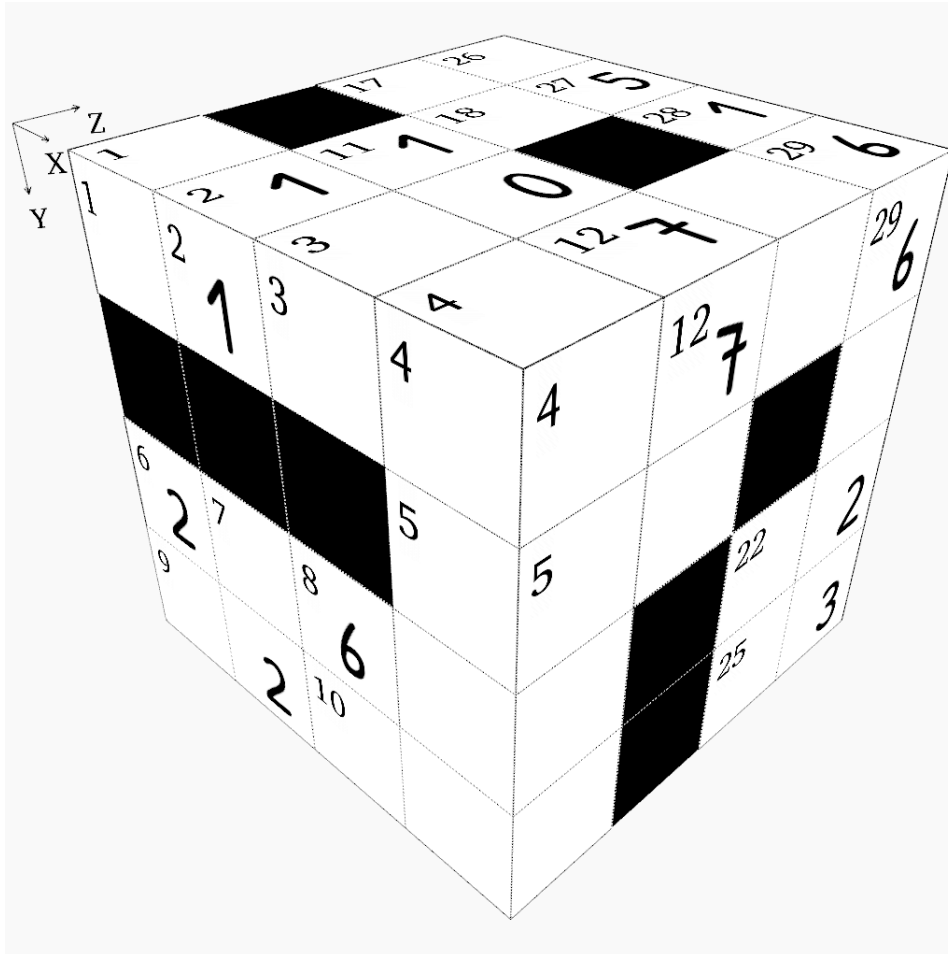


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #23



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	0	12	17	18		26	27	28	29
	1				1		7					5	1	6
			5		13	14		19	9	20			30	
6	7	8			15	2	16			21	22	31		2
9	2	10					1	23	24	3	25	32		3

X Direction

- 1 Z9 minus Y8
- 6 Twenty-three times a prime number
- 9 Ten times a prime number
- 11 A prime number
- 13 A square
- 15 A prime number
- 17 A cube
- 19 Thirty-six times Y16
- 21 Y7 plus Z24
- 23 Mean of Y17 and Y20
- 26 Two thousand two hundred forty-six more than X9
- 30 Three times a prime number
- 31 Thirty-two times a prime number
- 32 Forty-three times Z24

Y Direction

- 4 Ten times a prime number
- 6 A cube
- 7 Z25 reversed
- 8 Mean of Y6 and X11
- 11 X21 plus Z17
- 12 Z9 minus Z10
- 13 X15 plus Z20
- 16 Y31 minus X13
- 17 A prime number
- 18 Mean of Z24 and X11
- 20 A prime number
- 22 Twice the result of Z2 minus Y28
- 27 Forty-three times a prime number
- 28 Nineteen times Z20
- 29 A prime number
- 31 Four times Z25

Z Direction

- 2 Twenty-five times a prime number
- 3 X11 minus Y8
- 4 Four-fifths of X1
- 5 Mean of X11 and Y18
- 6 X11 times X17
- 7 Mean of Y7 and Z22
- 8 Five times a prime number
- 9 One thousand twenty-seven more than Z8
- 10 Fifty-nine times a square
- 13 Y22 plus Z24
- 14 Twice the result of Y4 minus Y27
- 17 Y11 minus Z13
- 20 Y11 minus Z24
- 22 Z20 minus Z17
- 24 X21 minus Z7
- 25 Y22 reversed

Solution:

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