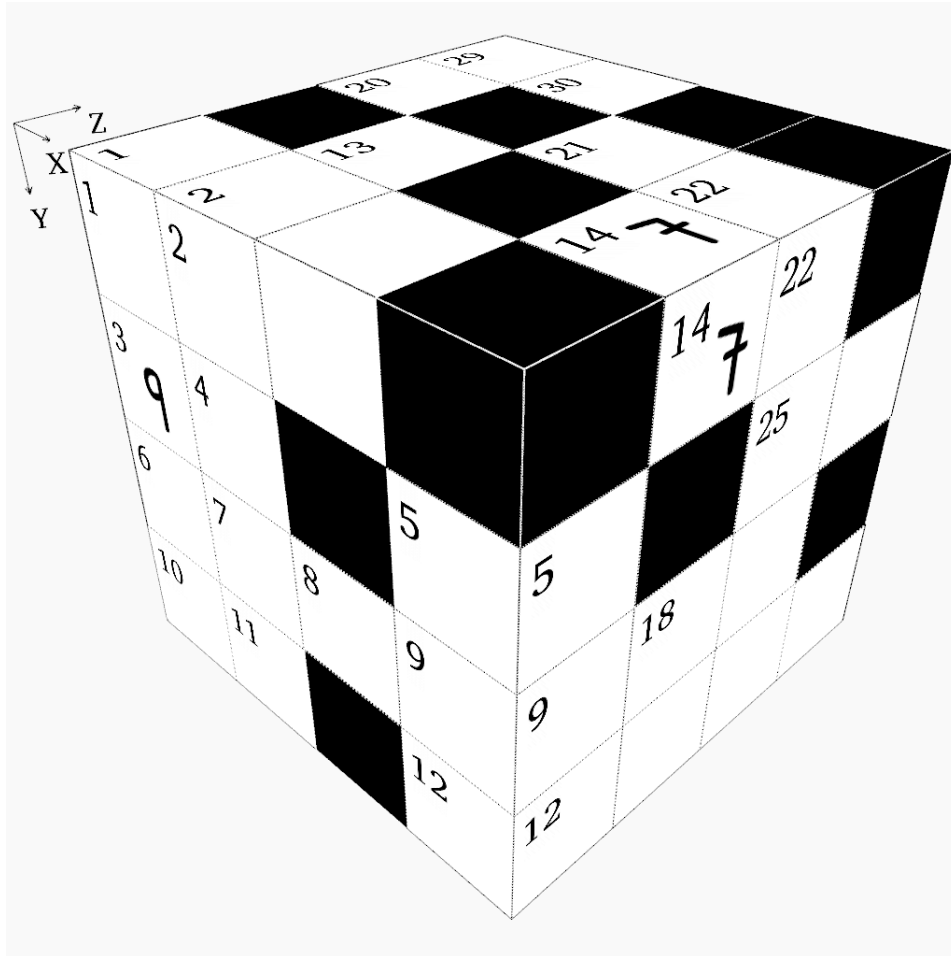


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #12



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				13		14	7	20		21	22	29	30		
3	9	4		5		15	16		23	24		25		31	32	
6	7	8	9			17		18	26		7			33		
10	11		12		19				27		28		34			

X Direction

- 1 Six times Y33
- 3 X17 minus Z2
- 6 Z16 times X19
- 10 Twice the result of X15 plus Z25
- 15 Z16 divided by Y33
- 17 X29 plus Y24
- 19 X3 minus Z20
- 21 Z4 divided by X1
- 23 Z10 minus X29
- 26 Seventeen times a square
- 27 Three times a prime number
- 29 Four-fifths of Z25
- 31 Twenty-five times Y33
- 34 Its digits total Z26

Y Direction

- 1 Four hundred one less than Z12
- 2 Ninety-six times a prime number
- 5 Mean of Z9 and Z28
- 13 X34 plus Z14
- 16 A square
- 18 Z14 minus X10
- 20 Five hundred forty more than X27
- 21 Seventeen times a prime number
- 22 Twenty-seven times X21
- 24 X3 plus Z20
- 30 Y18 plus Z25
- 32 Twice a prime number
- 33 Mean of X19 and Y16

Z Direction

- 2 X29 plus Z20
- 4 A palindrome
- 7 Nineteen times a prime number
- 8 Y24 times Y33
- 9 Ten times X21
- 10 Seven times a prime number
- 11 One thousand ninety-eight less than Y2
- 12 X29 times X1
- 14 Mean of Z2 and Y16
- 16 Forty-two times a prime number
- 20 Half of Z12, then subtract Y22
- 25 Mean of X19 and Z26
- 26 Y30 minus Z25
- 28 Y33 plus X21

Solution:

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