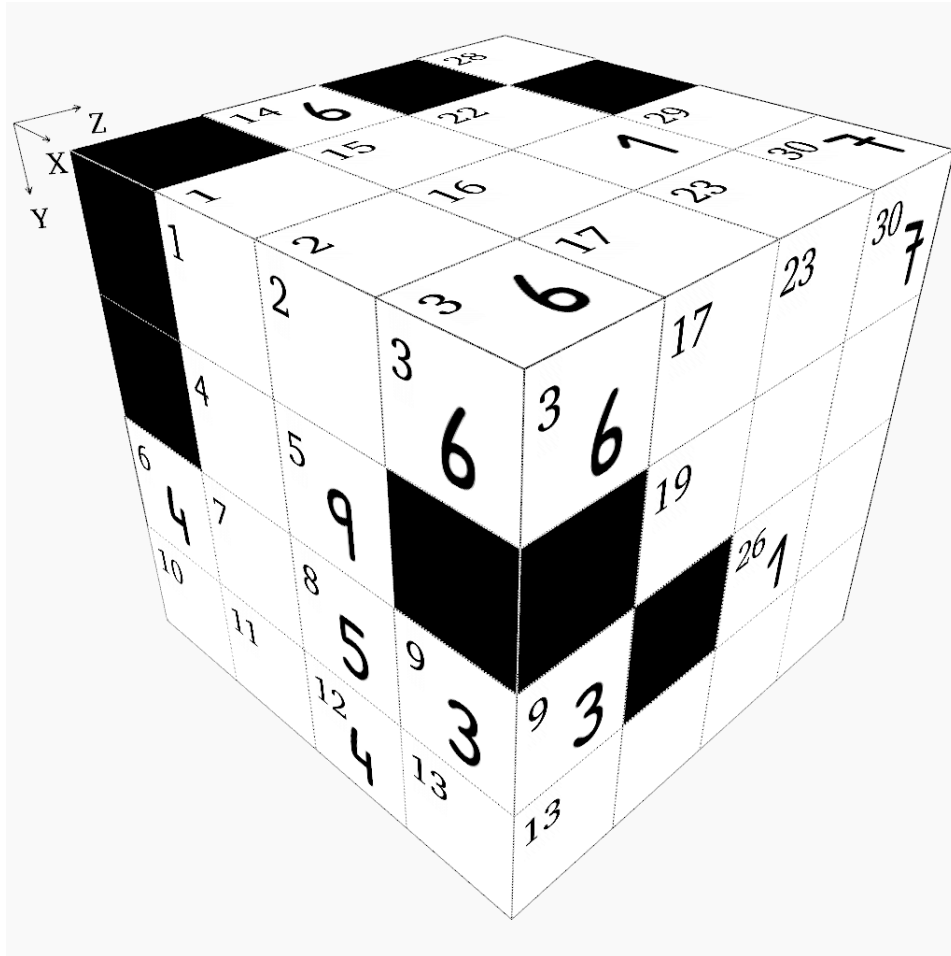


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #10



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	6	14	15	16	17		22		23	28		29	30
	4	5	9		18	3		0	19	24						
6	4	7	8	5	9	3	20	5				25	26	1		
10		11	12	4	13		21		0	8					33	5

X Direction

- 1 Eight times a prime number
- 4 X33 divided by Y17
- 6 Z12 plus half of X1
- 10 Fifty-three times a prime number
- 14 Twenty-two times a prime number
- 18 Fifty-one times a prime number
- 20 Mean of Z5 and Y15
- 21 A prime number
- 22 A prime number
- 24 Five times X29
- 25 Mean of X29 and Y6
- 27 X31 plus Y22
- 29 Mean of Z26 and X4
- 31 Twenty-one times Y32
- 33 Mean of X29 and Z11

Y Direction

- 1 Seven times a prime number
- 2 First two digits are the same as Z7
- 6 Mean of Z26 and Y31
- 9 Z11 divided by Y32
- 14 Twenty-eight times a prime number
- 15 Z19 plus Z7
- 16 A palindrome
- 17 X24 minus Z10
- 22 Mean of X25 and Z7
- 23 Seventy times a prime number
- 24 A prime number
- 25 Mean of X25 and Y17
- 28 Mean of Y24 and Z26
- 30 A prime number
- 31 Mean of X24 and Y22
- 32 Z4 divided by three

Z Direction

- 1 A cube
- 2 Y23 plus Z13
- 3 A prime number
- 4 Z26 plus Z5
- 5 Twice Y6
- 6 Twenty-seven times X29
- 7 All digits are the same
- 8 Z10 plus half of Y2
- 10 Y31 minus X4
- 11 X25 times Y32
- 12 Five times a square
- 13 A prime number
- 18 Mean of Y17 and X31
- 19 A prime number
- 26 X31 divided by forty-nine

Solution:

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