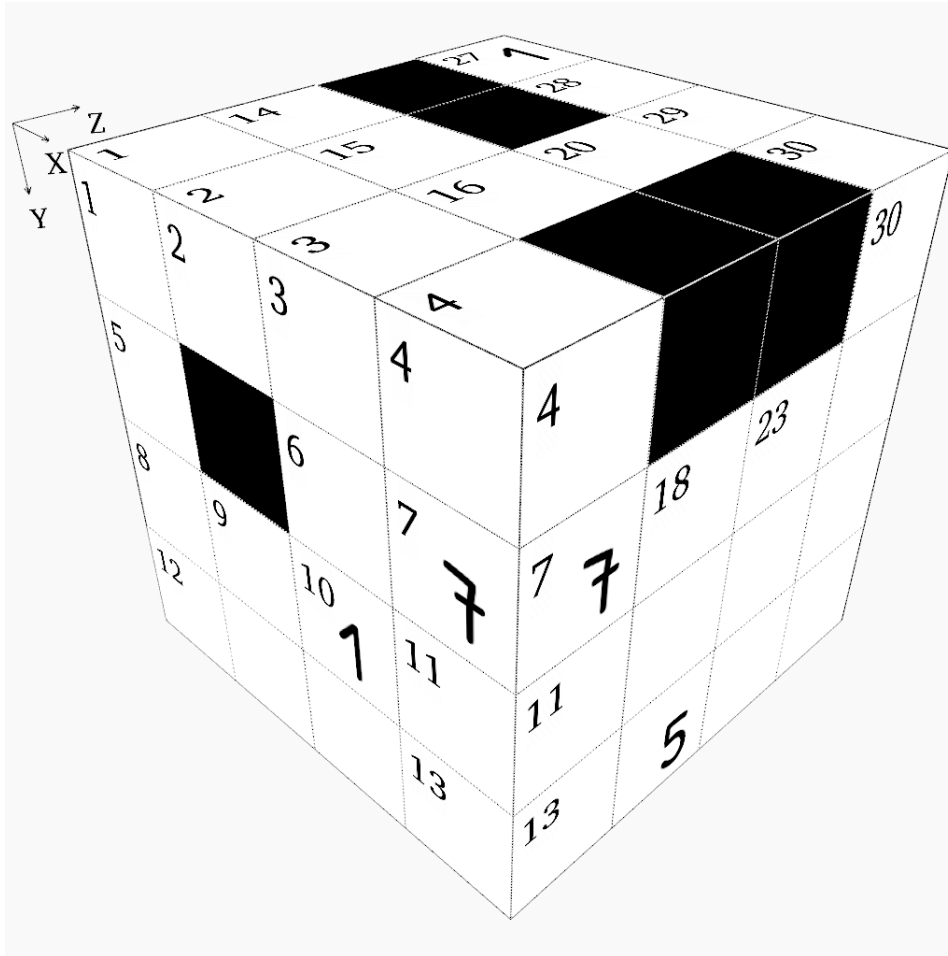


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #27



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	14	15	16				20		27	1	28	29	30
5			6	7	9			18	21		22	23	31	2	4	
8	9	10	1	11	19				24	5						
12				13				5	25		26				32	5

X Direction

- 1 Forty-two times a prime number
- 6 Y29 minus X26
- 8 Five times a prime number
- 12 X14 plus half of Y1
- 14 Y23 minus Y27
- 17 A prime number
- 19 One thousand four hundred thirty-five less than X17
- 22 Mean of Y29 and Z10
- 24 Z10 times Z26
- 26 Z9 divided by seventy
- 27 A prime number
- 31 Z6 minus Y18
- 32 Z25 minus X26

Y Direction

- 1 Forty-six times a prime number
- 3 Consecutive digits unordered
- 4 Mean of Z10 and Z11
- 9 Two-fifths of Z1
- 14 Twenty-six times a prime number
- 15 Twenty times a prime number
- 16 Twenty-two times X26
- 18 Sixty-three times X26
- 20 X27 minus X32
- 21 Nine times a prime number
- 23 Five times a square
- 27 Four-fifths of Z26
- 28 Twenty times X6
- 29 X6 plus Z26
- 30 Twice the result of Z5 minus Y9

Z Direction

- 1 Three times X26
- 2 Half of X32
- 3 One hundred forty-seven less than Y1
- 5 Sixteen times a prime number
- 6 Y3 minus Y15
- 7 X19 minus X6
- 8 Y23 plus X22
- 9 X31 minus half of Y4
- 10 A square
- 11 Twice the result of X27 plus Y18
- 13 Eighty-six times a prime number
- 25 Z3 minus X1
- 26 Y16 divided by twenty-two

Solution:

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