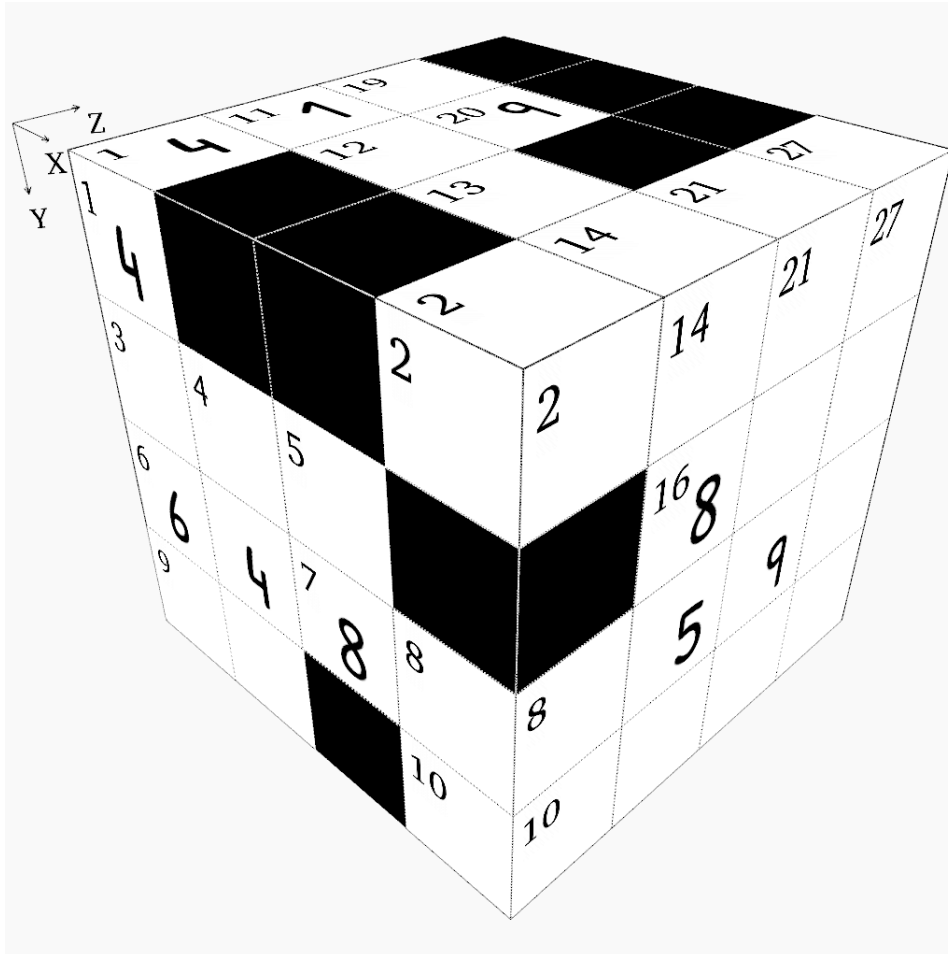


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #25



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 4			2	11 1	12	13	14	19	20 9		21				27
3	4	5		15			16 8	22	5	23				28 5	29
6 6	4	7 8	8	3		17 8	5	24 8			9		30		31
9			10			18		25		26 7			32 8	9	

X Direction

- 3 Seventeen times X31
- 6 Z12 plus Z6
- 9 Y27 divided by X3
- 11 Fourteen times a prime number
- 15 Eight times a prime number
- 17 Y12 minus Y29
- 18 Z25 minus X9
- 19 A square
- 22 Eighty-two times a prime number
- 24 Z2 plus X6
- 26 Seven times Y29
- 28 Mean of Z5 and Y29
- 31 Half of Y30, then subtract Y29
- 32 X24 divided by ninety-one

Y Direction

- 1 Eighty-seven times X19
- 4 Five times X18
- 5 Y12 minus Z25
- 8 X17 minus Z18
- 11 Half of Z16, then subtract Y4
- 12 X18 plus Y30
- 13 Four times Z5
- 14 Fifty-four times a prime number
- 19 Forty-one times a prime number
- 20 Twenty-five times Y8
- 21 A prime number
- 23 Mean of X28 and Z25
- 27 Two hundred forty-six more than Z6
- 29 X19 minus Y8
- 30 Mean of Z18 and X19

Z Direction

- 1 X3 plus Y11
- 2 Sixteen times a prime number
- 3 A prime number
- 4 Forty-five times a prime number
- 5 Mean of X11 and Y12
- 6 One thousand seven hundred fifteen less than X24
- 7 Seventeen times a prime number
- 8 A prime number
- 10 Twice the result of Y19 plus X18
- 12 Nine times Y29
- 16 Twice a prime number
- 18 Y4 minus Y11
- 25 Y27 divided by X17

Solution:

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