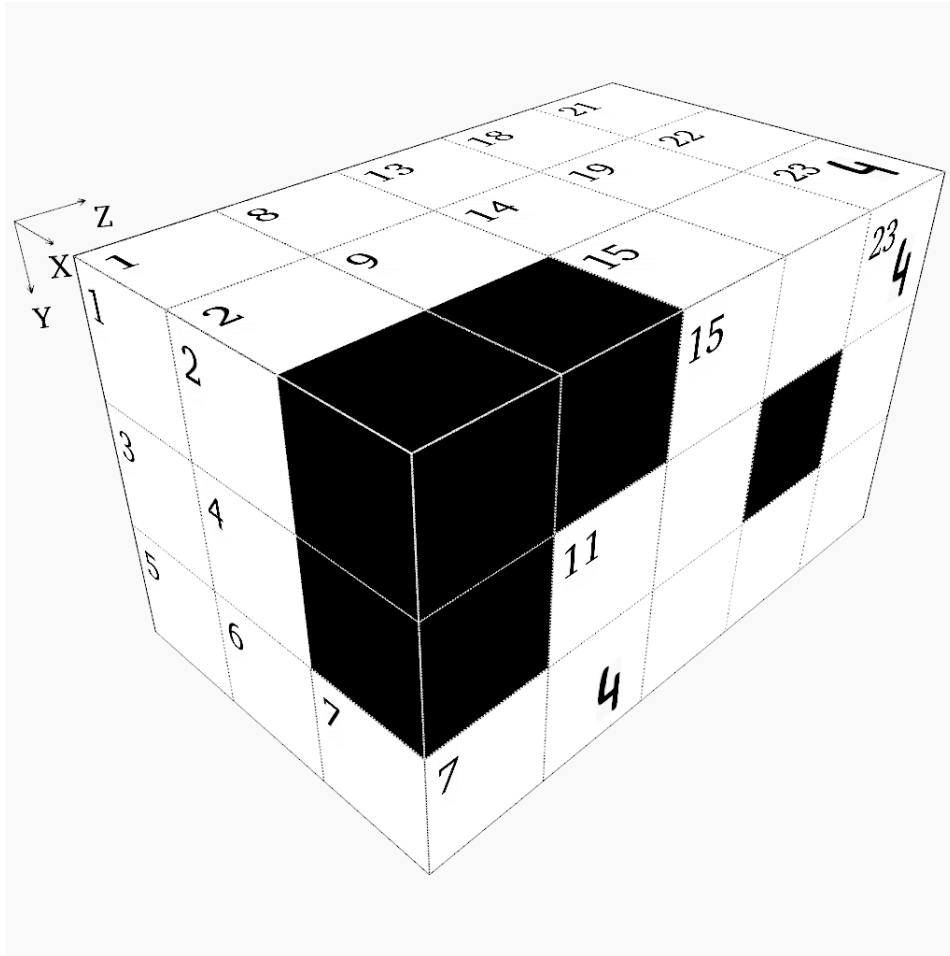


Difficulty: ★★★★★

Box - 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 box pictured above and divide it into individual X-Y layers, we will get these planes:

1	2		8	9		13	14	15	18	19		21	22	23
3	4			10	11		16		20			24		
5	6	7		12		17						25		

X Direction

- 1 Y22 divided by four
- 3 X5 minus Y2
- 5 Twenty-one times a square
- 8 X24 divided by X12
- 10 A prime number
- 12 X3 minus X20
- 13 Y22 minus X20
- 16 Y2 minus X12
- 17 A prime number
- 18 A palindrome
- 20 Half of Z11
- 21 Mean of Y1 and Y19
- 24 Eighteen times Z20
- 25 Mean of X24 and X12

Y Direction

- 1 A prime number
- 2 X3 plus X20
- 9 One hundred seventeen less than X17
- 11 Same as X16
- 14 Half of Y23, then subtract X10
- 15 Seven times a prime number
- 18 Fifty-two less than X18
- 19 A prime number
- 21 Mean of X25 and Z17
- 22 X13 plus half of Z11
- 23 Same as X25

Z Direction

- 1 One thousand five hundred seventy-nine less than Z7
- 2 A prime number
- 4 Sixteen times a prime number
- 6 A prime number
- 7 Seventy-six times a prime number
- 11 Same as Y11
- 15 Mean of Y15 and X17
- 17 Mean of X24 and Y21
- 20 Twice X12

Solution:

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