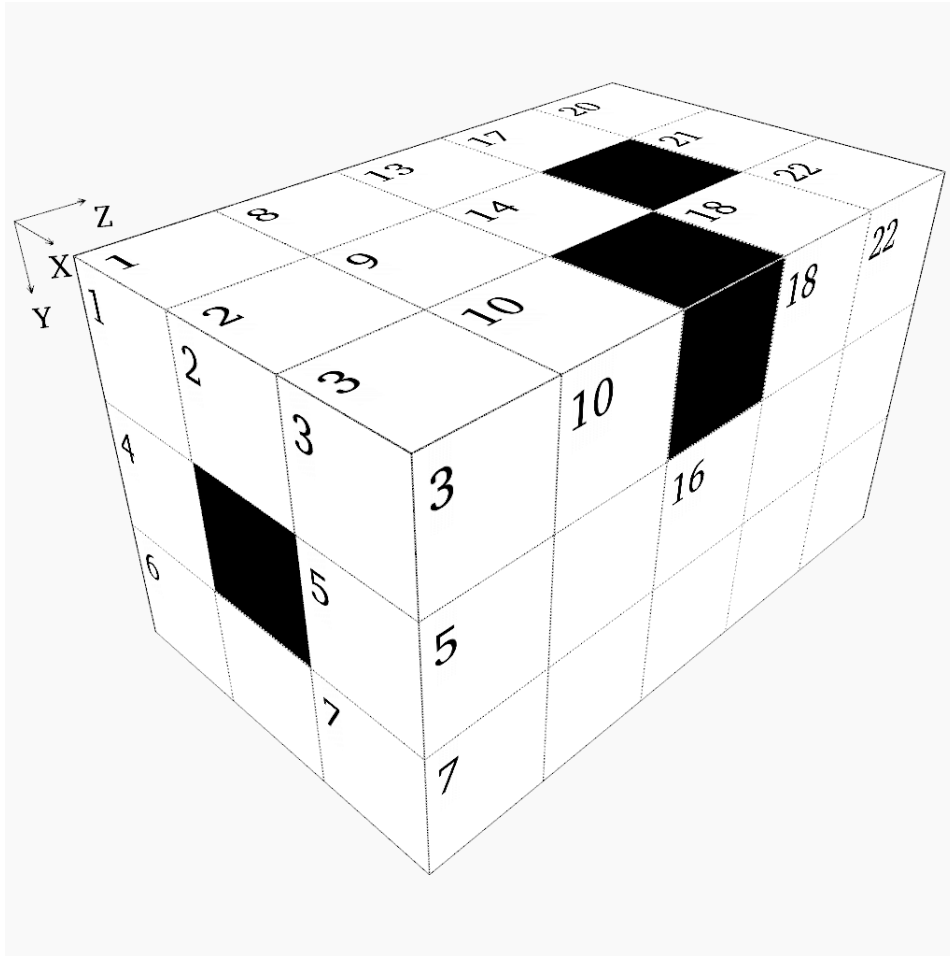


Difficulty: ★★☆☆☆

Box - Challenging Puzzle #43



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

X Direction

- 1** Twice the result of Y3 minus X11
- 6** Nine times a prime number
- 8** Mean of Y17 and X24
- 11** Five times a prime number
- 13** A square
- 15** Mean of Y16 and X13
- 19** A prime number
- 20** Y20 plus X13
- 23** A prime number
- 24** Three times Z6

Y Direction

- 1** X23 minus Y22
- 3** Y21 minus Z18
- 8** Mean of Y22 and X23
- 9** Half of Z4
- 10** Mean of Z2 and Y16
- 14** Mean of Y16 and Z18
- 16** A prime number
- 17** Z1 divided by X19
- 18** Mean of Y21 and X15
- 20** X24 minus Y9
- 21** A square
- 22** Seven times a prime number

Z Direction

- 1** Seventy-five times a prime number
- 2** Five times a prime number
- 3** Twice Z18
- 4** X8 minus Y10
- 5** Twelve thousand three hundred ninety-six more than Z1
- 6** Y1 minus X6
- 7** A prime number
- 12** Ten times a prime number
- 18** A prime number
- 19** X1 divided by eight

Solution:

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