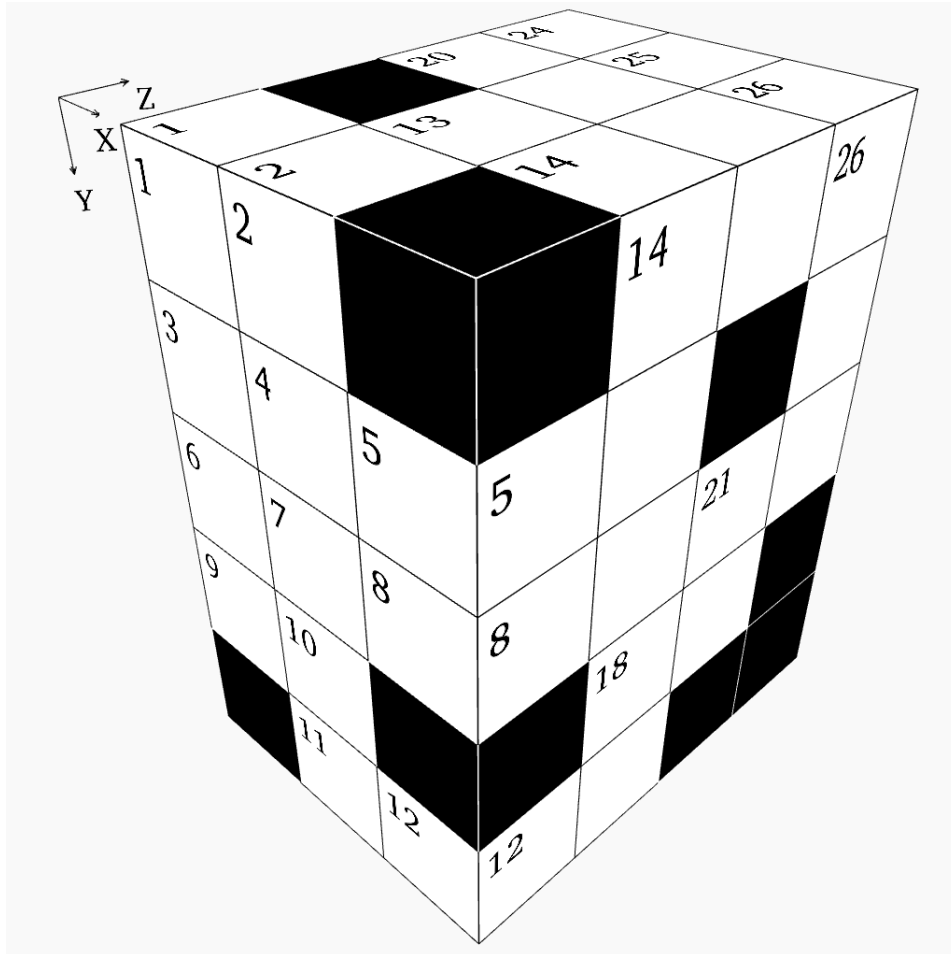


Difficulty: ★★☆☆☆

## Box - Challenging Puzzle #60



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

### X Direction

- 1 Mean of Y22 and X19
- 3 Mean of X24 and Y21
- 6 Seven times a prime number
- 9 Half of X22
- 11 X28 minus Z4
- 13 X1 plus X9
- 15 Thirty-four times a prime number
- 16 Z11 plus Y15
- 17 Z4 plus Y22
- 19 Z10 divided by X16
- 20 A square
- 22 Four times Z20
- 23 Z14 minus X1
- 24 Twice a prime number
- 27 Same as X23
- 28 Mean of Y20 and Z14

### Y Direction

- 1 Eight times a prime number
- 2 Twice a prime number
- 5 X17 minus X9
- 13 A prime number
- 14 Thirty-seven times a prime number
- 15 Same as Z23
- 20 X9 plus Y15
- 21 Mean of Z20 and Z4
- 22 Mean of Z12 and X1
- 25 Nine times a prime number
- 26 Five times a prime number

### Z Direction

- 2 Y22 times Z7
- 3 Thirty times a square
- 4 Twice the result of X15 minus X6
- 5 Mean of X22 and Z7
- 6 Twenty-seven times a prime number
- 7 Mean of X23 and Y5
- 8 Y25 minus X15
- 10 Fifty-three times a square
- 11 X16 minus Z23
- 12 Z14 minus X1
- 14 X1 plus X27
- 18 Sum of digits in Y14
- 20 X28 minus X17
- 23 Twice the result of X28 minus X11

**Solution:**

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