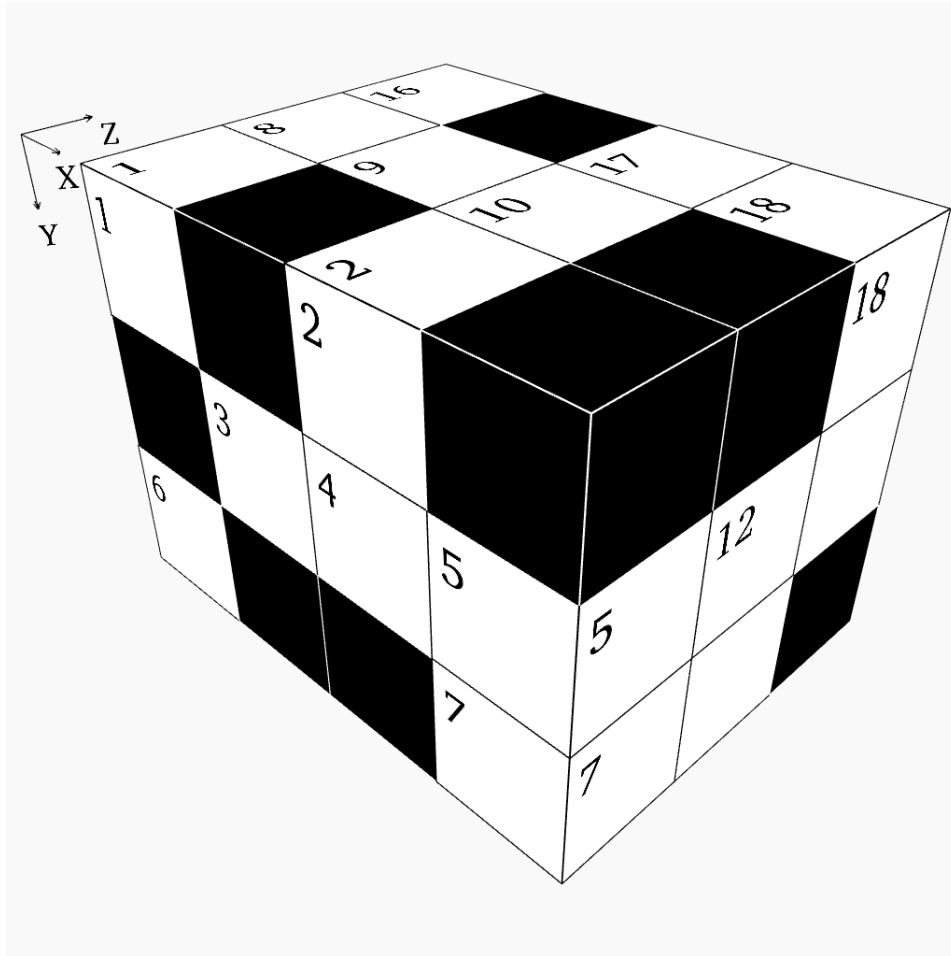


## Box - Intermediate Puzzle # 1



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	10		16		17	18
	3	4	5	11			12	19	20		
6			7	13	14	15		21			

**X Direction**

- 3 Z3 plus Z15
- 8 X13 minus Z2
- 11 Six times a prime number
- 13 Fifty-one times a square
- 17 A square
- 19 A prime number
- 21 Seven times a prime number

**Y Direction**

- 2 Mean of Y5 and Z1
- 5 Z7 reversed
- 8 Y18 plus Y9
- 9 Mean of Y10 and Y17
- 10 Seven times a prime number
- 12 Consecutive digits in descending order
- 16 X21 plus Z14
- 17 Three times Y5
- 18 Z15 minus half of X17
- 20 Five times X17

**Z Direction**

- 1 Rearranged digits of Y8
- 2 A prime number
- 3 Y5 plus half of Y2
- 4 A prime number
- 5 A prime number
- 6 Nineteen times a prime number
- 7 Y5 reversed
- 11 Z1 minus Y12
- 14 Twice the result of Z4 minus Z6
- 15 Mean of Y5 and Z7

**Solution:**

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