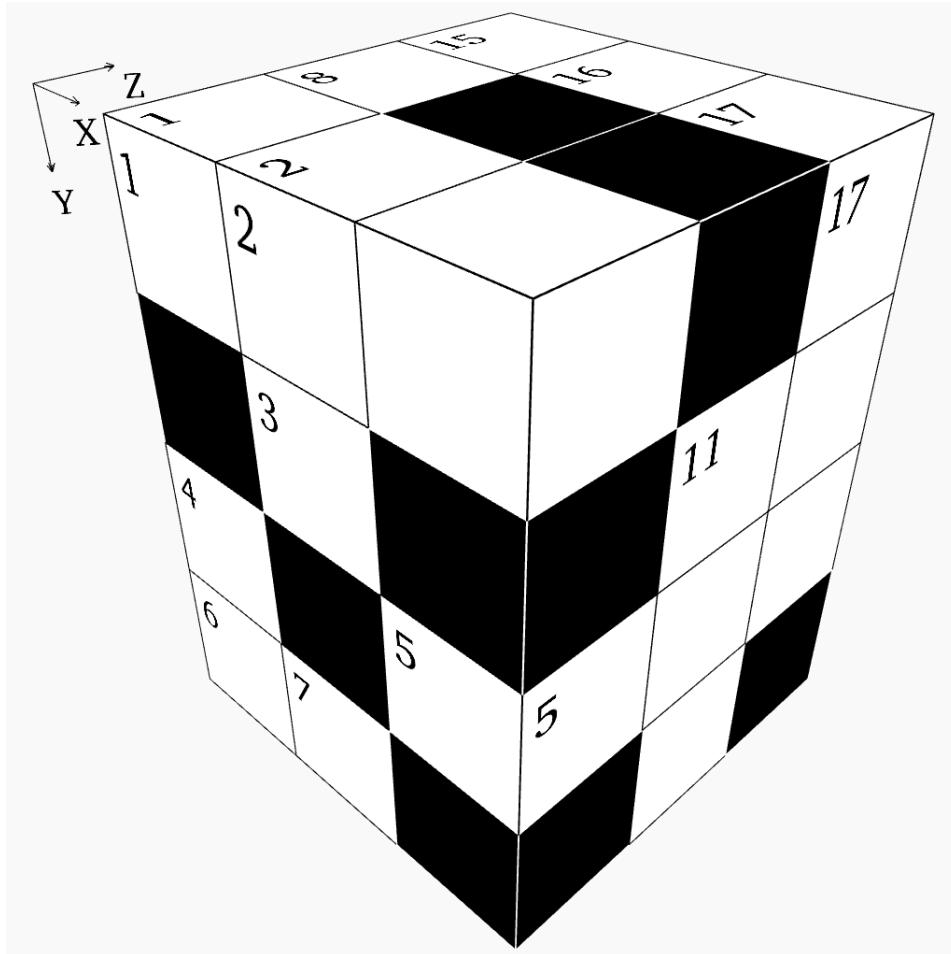


Box - Intermediate Puzzle #37



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			15	16	17
	3		9	10	11	18		
4		5	12	13			19	
6	7			14		20		

X Direction

- 1 Four times a prime number
- 6 Same as Y2
- 9 Four-fifths of Y17
- 12 X18 minus Y17
- 14 Y4 divided by four
- 15 Twice a prime number
- 18 A cube
- 19 Mean of X20 and X14
- 20 X12 minus half of X6

Y Direction

- 2 X20 minus Z4
- 4 Half of X1, then subtract Y17
- 8 Z1 minus Z5
- 10 A prime number
- 11 Half of Z3, then subtract X14
- 15 Y16 divided by X18
- 16 X18 times Z9
- 17 Ten times a prime number

Z Direction

- 1 Z3 minus X18
- 3 Sixty-eight times Z9
- 4 X20 minus X6
- 5 X20 plus Z4
- 7 Sixty-three times Y15
- 9 Mean of X14 and Z13
- 11 A prime number
- 13 Three times a prime number

Solution:

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