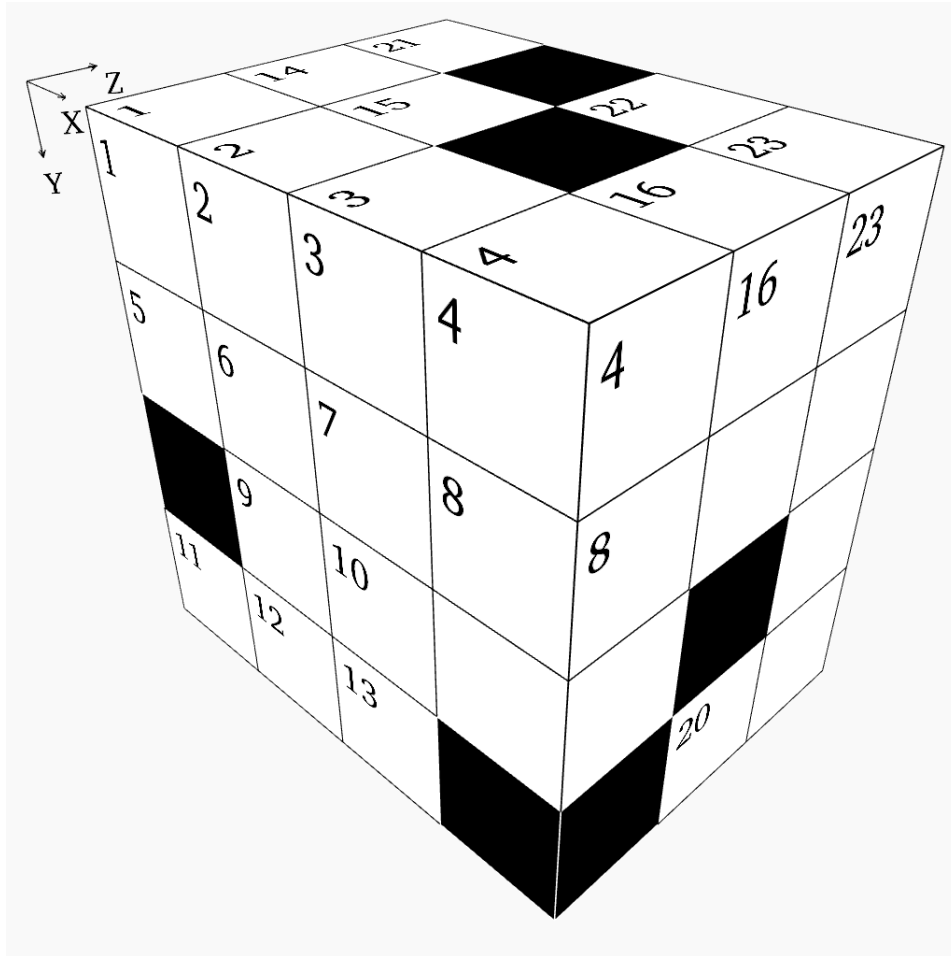


Box - Intermediate Puzzle #17



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

X Direction

- 1 Eleven times a prime number
- 5 Mean of Y2 and Z7
- 9 Mean of X26 and Z10
- 11 Mean of Y21 and Z8
- 14 Y15 plus Z2
- 17 Nine times a prime number
- 19 One hundred forty more than Z4
- 22 A cube
- 24 First two digits are the same as first two digits of X27
- 26 Rearranged digits of X27
- 27 Six times Z20

Y Direction

- 1 X11 divided by X22
- 2 Five times a prime number
- 3 Mean of Y14 and X11
- 4 Seventy-four times Y1
- 14 First two digits are the same as X14
- 15 X26 divided by Y21
- 16 Mean of Y21 and Y15
- 18 Five times a prime number
- 21 Mean of Z11 and Y16
- 22 Twice the result of X19 plus Z5
- 23 Seventy-eight times a square
- 25 Fourteen times a square

Z Direction

- 1 Y18 plus X22
- 2 Half of Y4, then subtract X27
- 4 Its digits total Y16
- 5 Twice a prime number
- 6 X24 minus X5
- 7 Three times a prime number
- 8 Two-thirds of X17
- 10 Y21 plus X27
- 11 Y1 reversed
- 12 Twenty-one times Y21
- 13 Twice the result of Z8 minus Z6
- 20 Seven times Y15

Solution:

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