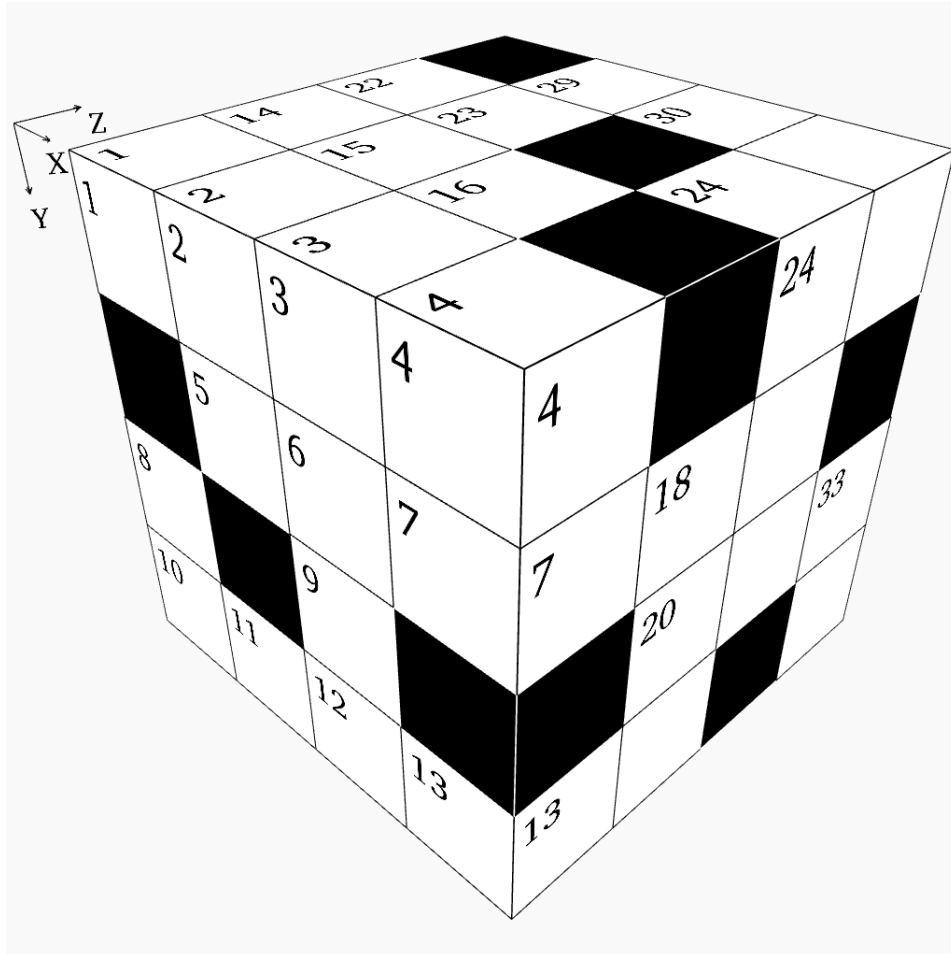


Cube - Intermediate Puzzle #6



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 cube pictured above and divide it into individual X-Y layers, we will get these planes:

1	2	3	4	14	15	16		22	23		24		29	30		
	5	6	7		17		18	25		26		31				
8		9				19	20			27		32			33	
				21				28								
10	11	12	13											34		

X Direction

- 1 Z2 minus Y18
- 5 A cube
- 10 Three hundred sixty-two more than Z10
- 14 Fifteen times a prime number
- 17 Sixty-eight times Y2
- 19 Mean of X22 and Z1
- 21 Four hundred thirty-five more than X32
- 22 Z24 minus X27
- 25 Last two digits are the same as Z3
- 27 Mean of Z25 and Y4
- 28 Eleven times a prime number
- 29 A prime number
- 32 Twenty-nine times Z1
- 34 Y2 plus Z13

Y Direction

- 2 Z24 minus X19
- 3 Fifty-one times a square
- 4 A square
- 8 Y33 minus half of X34
- 15 Z1 minus X22
- 16 One thousand one hundred sixty-eight more than X21
- 18 Y22 plus Y26
- 22 Mean of Y4 and Y8
- 23 Mean of X22 and Z3
- 24 X17 plus half of Z5
- 26 Z7 minus Z13
- 30 Half of X21, then subtract Y31
- 31 Mean of Z20 and X29
- 33 X22 plus Y22

Z Direction

- 1 X19 plus half of Y15
- 2 Seventeen times a prime number
- 3 X27 reversed
- 5 Eight times X22
- 6 Mean of Z2 and X28
- 7 Y2 plus Y26
- 9 Twice the result of X32 plus X29
- 10 Thirty-one times X19
- 11 Three times a prime number
- 12 X17 plus X5
- 13 Sum of digits in X10
- 20 Z12 minus Z3
- 24 X19 plus Z13
- 25 Eight times Z13

Solution:

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