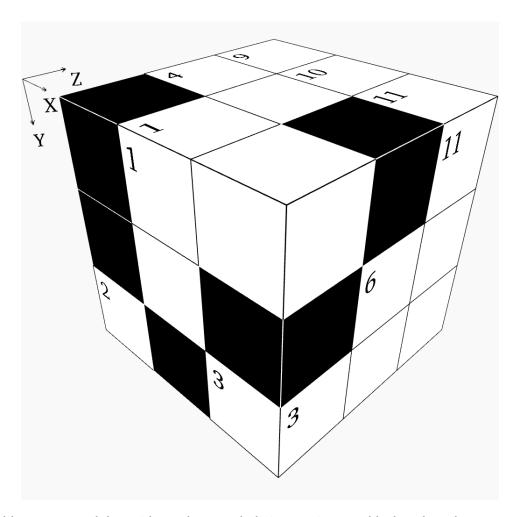
Cube - Intermediate Puzzle #12



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		4			9	10	11
			5		6	12		
2		3	7	8		13		

X Direction

- 1 Mean of X4 and Z8
- **4** X13 minus Y9
- **7** Z1 minus half of Y1
- **9** Seven times a prime number
- 12 One hundred fifty-seven more than Y4 10 Twice the result of Z3 minus Z4
- 13 Four less than Z2

Y Direction

- 1 Mean of X1 and X4
- **4** Consecutive digits unordered
- 6 A prime number9 Rearranged digits of Y11
- 11 Twice a square

Z Direction

- 1 Twice a prime number
- 2 X9 plus half of Y9
- **3** Forty-two times a square
- 4 Z5 minus Y6
- **5** Y11 minus X1
- 6 Z5 minus X4
- 8 Twice Y6

Solution:

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