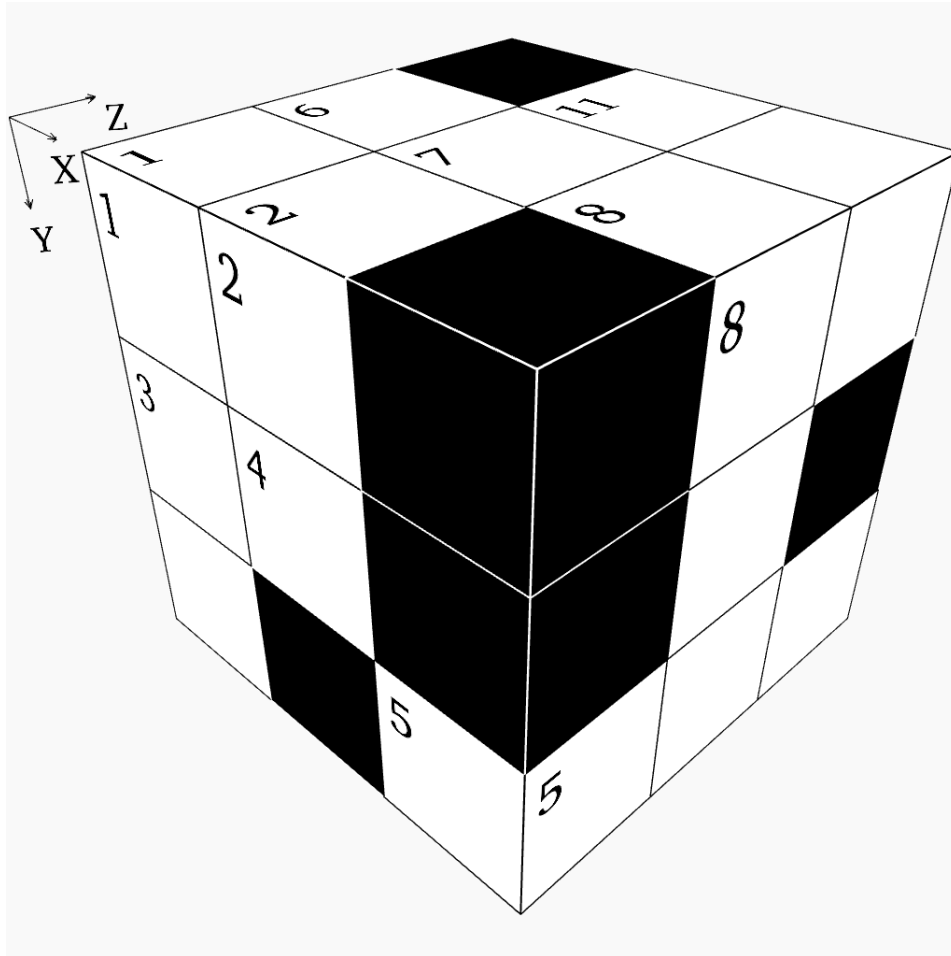


## Cube - Intermediate Puzzle #51



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		6	7	8		11	
3	4			9		12		
		5		10			13	

**X Direction**

- 1 Three times a prime number
- 3 Y1 minus Z4
- 6 Thirty-three times a prime number
- 9 Same as X12
- 10 Mean of Z10 and X3
- 11 Same as X13
- 12 Y7 divided by six
- 13 Two-thirds of Z10

**Y Direction**

- 1 Z4 plus Y2
- 2 Same as X3
- 7 X9 plus half of Y8
- 8 Ten times X12
- 11 Y2 plus half of Z5

**Z Direction**

- 1 A prime number
- 2 Twenty-two times a square
- 4 Twenty-nine times a prime number
- 5 Eighty-six less than Y7
- 8 Mean of Z1 and X12
- 10 Six times a prime number

**Solution:**

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