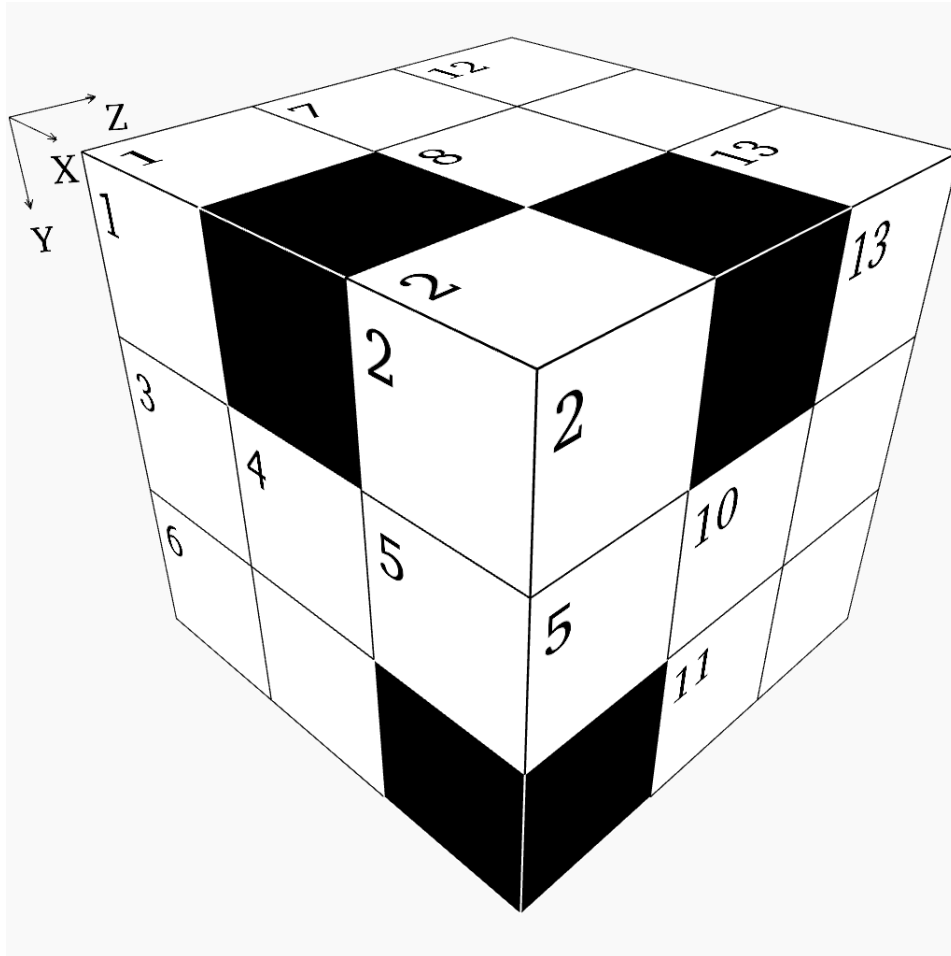


## Cube - Intermediate Puzzle # 18



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	7	8		12		13
3	4	5	9		10			
6					11		14	

**X Direction**

- 3 Mean of X9 and Y2
- 6 Y10 plus Z11
- 7 Y1 minus Z8
- 9 Three times a prime number
- 12 Y13 minus half of X14
- 14 Y7 minus Y10

**Y Direction**

- 1 A prime number
- 2 X14 minus Z4
- 4 Y7 minus Z8
- 7 X14 plus Z3
- 8 Three-fourths of Y4
- 10 Y13 divided by forty-five
- 13 Forty-five times Z3

**Z Direction**

- 1 Five times a prime number
- 3 Two-fifths of Z8
- 4 Z11 plus Y8
- 5 X6 plus Y7
- 8 Y13 divided by eighteen
- 11 Y13 divided by twenty-seven

**Solution:**

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