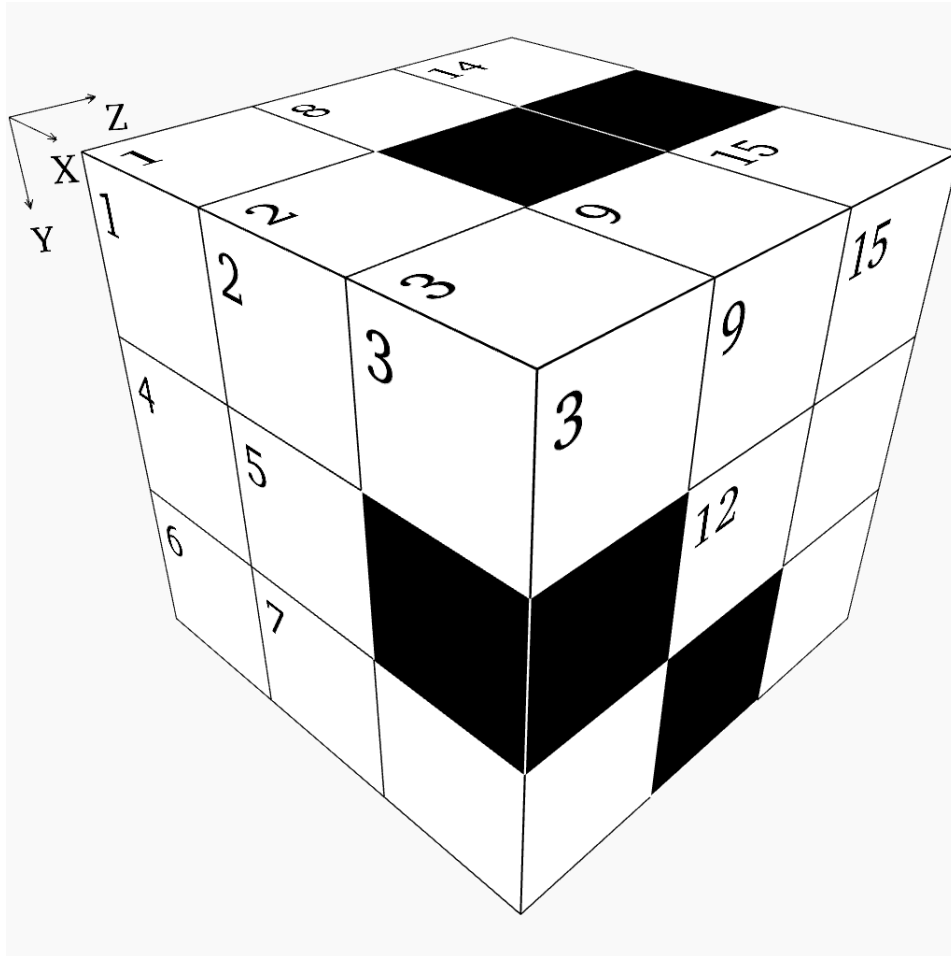


# Cube - Intermediate Puzzle #1



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	8		9	14		15
4	5		10	11	12	16		
6	7		13					

**X Direction**

- 1 Four times Y14
- 4 Twice a prime number
- 6 Y9 times Z6
- 10 Rearranged digits of X6
- 13 Z4 divided by fifty-seven
- 16 Twenty-one times a prime number

**Y Direction**

- 1 Mean of X1 and Y2
- 2 Twice a prime number
- 8 Seven times a prime number
- 9 X10 divided by forty-one
- 11 Same as X13
- 14 A prime number
- 15 Fourteen times Z7

**Z Direction**

- 1 Five times a prime number
- 3 A prime number
- 4 Fifty-seven times Y11
- 5 Half of Y15, then subtract Y14
- 6 A prime number
- 7 Y8 minus X4
- 12 A prime number

**Solution:**

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