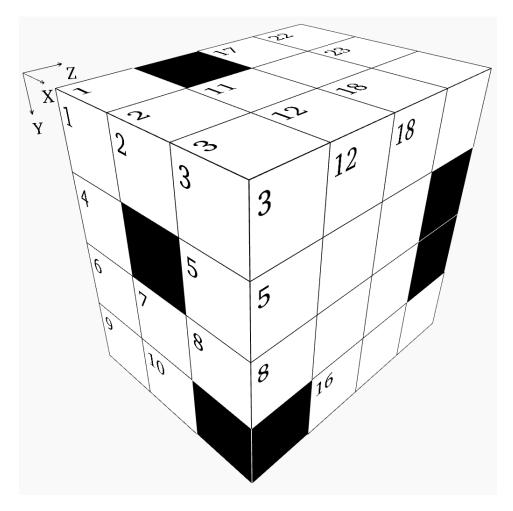


# **Box - Challenging Puzzle #1**



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

1	2	3		11	12	17		18	22	23	
4		_	12						24		
4		5	13						24		
6	7	8		14		19	20		25		
9	10			15	16		21		26		

#### **X** Direction

- **1** Rearranged digits of X6
- **6** Fifty-one times X25
- **9** Z8 minus X15
- 11 Same as Y7
- 13 Twenty-five times X25
- **14** Mean of X24 and Y20
- **15** Half of X21
- **17** Twice a prime number
- **19** Y17 reversed
- 21 Twice the result of Z8 minus X9
- 22 Y17 minus X26
- 24 Seven times X25
- 25 Y22 divided by X1
- **26** Five times a prime number

### **Y Direction**

- **1** A prime number
- **3** A prime number
- **7** Same as Z19
- 11 Seventy-six times a prime number
- **12** Y3 plus Y17
- 17 X19 reversed
- **18** Twenty-eight times a prime number
- **20** Half of X19, then subtract X13
- **22** Two hundred fifty-seven more than Y1
- 23 Twice a prime number

#### **Z** Direction

- **2** Six times a prime number
- **3** A prime number
- **4** Thirty-one times a prime number
- **5** Twice a prime number
- 7 Y23 minus X24
- **8** X11 plus X24
- 10 Mean of Y12 and Y1
- **16** Mean of X19 and X17
- **17** A square
- 19 Y18 minus half of Z2

## **Solution:**

1	5	6		6	1	8	4	2	1	6	1
4		9	2	7	5	4		8	7	7	
5	6	1		6	3	6	4	8	1	1	
9	1			4	7		٩	4	6	8	5