

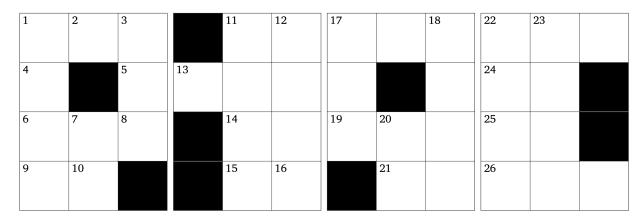
# Box - Challenging Puzzle #1

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:



#### **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		٩					8			
5	6	1	6	3			8			
٩	1		4	F		٩	4	6	8	5