



# **Box - Intermediate Puzzle #8**

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

#### **X** Direction

- **1** Z7 minus Y23
- 3 Three times X11
- 6 Mean of Z5 and Z2
- 9 Y23 plus X22
- **11** Three-fifths of X18
- **13** Fifty-nine more than X19
- **16** Five times a prime number
- 17 Mean of Z9 and X6
- 18 Mean of Y15 and Y20
- 19 Z5 plus half of Z1
- **20** Z7 divided by four
- **22** X9 minus Z19
- 24 Fifty times Z10

#### **Y** Direction

- 1 Fifteen times a prime number
- **2** A square
- **3** Mean of X3 and X18
- 13 Twice the result of Y21 plus Z8
- **14** A prime number
- **15** Three times a prime number
- 20 X1 minus X20
- **21** Eight thousand fifty-seven less than Y14
- 23 Y20 plus Z6

### **Z** Direction

- 1 Twenty-seven times X22
- **2** Mean of Z11 and X11
- **3** Z12 divided by thirty**4** A prime number
- **5** A square
- **6** Z19 minus Y20
- **7** X1 plus Z19
- **8** Seven times a prime number
- **9** Fifty-three more than Z4
- **10** X18 divided by nine
- **11** Fifty-seven times Z10
- **12** Twenty times Y20
- **19** Same as Y23

# Solution:

	4	3	5	3	1		2	2
1	6	2	4	4	5		1	6
2	8	4	4	8	٩			F
6	1		٩	0		4		5
	5	4	4	7	2	5	0	0