



# Box - Intermediate Puzzle #19

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		7	8	9	13	14
		3		10			
4	5		11		12		
6						15	

#### **X** Direction

- **1** X10 plus half of Y11
- **4** Consecutive digits in ascending order
- **6** Fifteen times Y5
- 7 Nine times Z9
- 10 A prime number
- 11 Mean of Z3 and X7
- **13** One hundred fifty-eight more than X15
- 15 A prime number

#### **Y** Direction

- **1** Twenty-eight times a prime number
- **5** Four times Y11
- 8 Fifty-five times X10
- **9** Twice the result of Y1 minus X13
- **11** X6 divided by sixty
- 13 Consecutive digits unordered
- **14** Y13 minus half of X4

#### **Z** Direction

- 1 Z3 minus X1
- 2 Consecutive digits in descending order
- 3 X7 minus X4
- **4** Four times a prime number
- 5 Same as Z12
- **6** Thirty-two times Z9
- **9** X13 divided by fifty-one
- 12 Consecutive digits in ascending order

## Solution:

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