

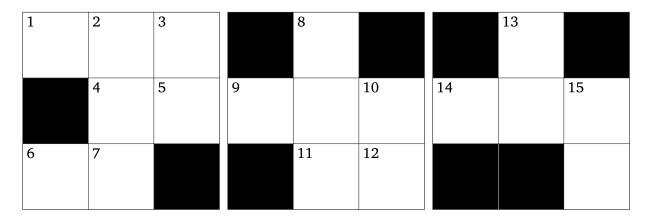
# Cube - Intermediate Puzzle #38

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:



#### **X** Direction

- **1** X14 minus X6
- 4 Y15 plus X6
- 6 Same as Z9
- **9** A prime number
- **11** Four times a prime number
- 14 X1 plus Z9

#### **Y** Direction

- 2 Z12 plus Z2 3 X11 minus X4
- **8** Fifteen times a square
- **10** Six times Y15 **13** A prime number
- **15** X1 divided by eighty-one

#### **Z** Direction

- **2** Three times a prime number
- **4** Three times a prime number
- 5 Y8 plus half of Y107 Mean of Z9 and Z5
- **9** X4 minus Y15
- 12 All digits are the same

## Solution:

9	7	2		1			7	
	3	1	1	3	7	٩	٩	1
1	٩			5	2			2