

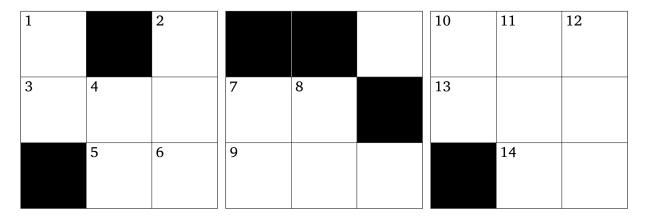
# Cube - Intermediate Puzzle #5

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

- **3** Half of Z6, then subtract Z3
- **5** Twice a prime number
- **7** Y8 reversed
- **9** Thirty-two times a prime number
- **10** Twice a prime number
- **13** Nine times a prime number
- 14 A square

#### **Y** Direction

- **1** Half of X10, then subtract X13
- **2** Eight times a prime number
- 4 Y8 reversed
- **7** A prime number
- 8 X9 divided by Y7
- 10 Half of Y1
- **11** Twenty-seven times a prime number
- 12 Consecutive digits in descending order

#### **Z** Direction

- **2** Six times a prime number
- **3** Thirteen times a prime number
- 4 Consecutive digits unordered
- **5** Mean of Z2 and Y2
- **6** Twice a prime number

## Solution:

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