

## X Y 2 3 1 1 1 1 1 1 1 1 5 6 6 6

# Cube - Intermediate Puzzle #13

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:

		1	7		8		13	
2	3		9	10	11	14		15
4	5	6		12			16	

#### **X** Direction

- **2** X12 minus Y2
- **4** Y7 plus Z11
- 9 Twice a prime number12 Ten times a prime number
- **14** Twenty-seven times X16
- **16** Consecutive digits in descending order **13** A prime number

#### **Y** Direction

- **2** A prime number
- **3** Twice the result of X16 plus Z1 **7** Mean of X16 and Z11
- 8 Ten times Y7
- 10 A prime number
- **15** Three-fifths of X12

#### **Z** Direction

- **1** X16 minus Y10
- **2** Four times a prime number
- **3** Twice the result of Z2 plus X12
- **5** Eleven times a prime number
- **6** Twice a prime number
- **11** Twice **Ŷ**15

### Solution:

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