

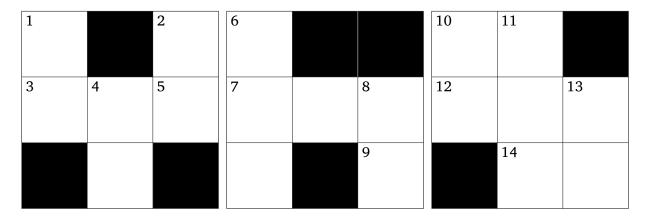
Cube - Intermediate Puzzle #24

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** Y8 plus X12
- **7** Thirty-nine times a square
- **10** Five times a prime number
- **12** A prime number
- 14 Mean of Y4 and Y2

Y Direction

- **1** Three times a square
- **2** X7 divided by $\dot{Y13}$
- **4** Z4 minus half of Y11
- **6** X10 plus Y1
- **8** A prime number
- **10** Seven times Y13
- 11 Mean of Z3 and X7
- 13 Z3 divided by forty-seven

Z Direction

- **1** Twice a prime number
- **3** Forty-seven times Z9
- 4 Seven times a prime number5 Half of Z3, then subtract Y89 X7 divided by Y2

Solution:

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