

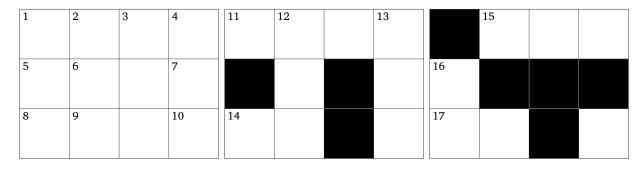
Box - Intermediate Puzzle #29

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:



X Direction

- **1** Twice a prime number
- **5** First, and second digits are the same
- 8 Sixty-one times a prime number 11 X5 minus half of Z9
- 14 Same as Y16
- 15 Z10 minus Z8
- 17 Twice a square

Y Direction

- 1 Z8 plus X17
- **2** A prime number **3** Ninety-six more than Y12
- **4** Z2 minus half of Z6
- **12** Y4 minus Z1
- 13 Z7 plus X14
- 16 Y13 minus Z7

Z Direction

- 1 Y3 minus Y2
- 2 Z7 plus Z4
- **3** Fifteen times Z1
- 4 Twice a prime number6 Three-fifths of X17
- 7 A square
- 8 Forty-five times a prime number9 Nineteen times X17
- **10** Thirteen times a prime number

Solution:

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