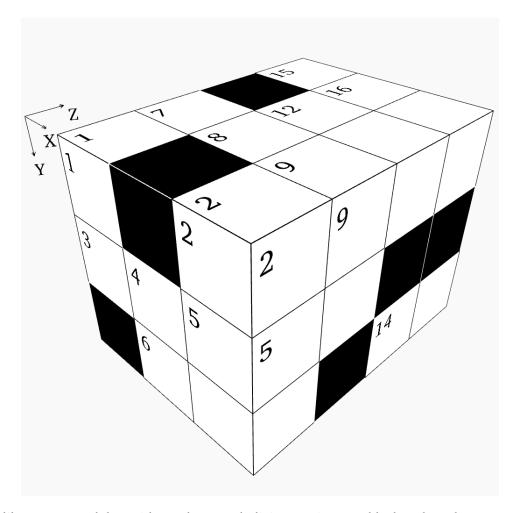
Box - Intermediate Puzzle #35

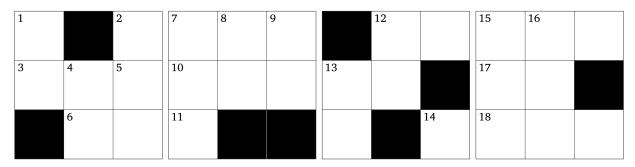


This puzzle is like a crossword, but with numbers. Each digit occupies a 3D block and can be a part of a "word" in the X,Y, and Z directions.

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

- 3 Thirteen times a prime number
- **6** Y16 divided by forty
- **7** A prime number
- **10** Thirteen times a prime number
- **12** X15 divided by Y8
- 13 Mean of X17 and Y4
- **15** Nineteen times a square
- **17** Twice the result of X7 minus Z5
- **18** Z8 minus Y13

Y Direction

- **1** Z11 minus X6
- 2 A palindrome
- 4 Z4 minus half of Z3
- 7 Mean of Y2 and Y13
- 8 X18 divided by six
- **9** Three times a prime number
- 12 Mean of Y4 and X17
- 13 Mean of Y4 and Z14
- 15 Twenty-seven times a prime number
- **16** Fifty-five times a square

Z Direction

- 1 X7 minus Y4
- 2 Sixteen times a prime number
- 4 Fourteen times a prime number
- **5** Z8 minus Y9
- **8** Six times a prime number
- **11** Y13 plus Z1
- **14** X15 divided by X12

Solution:

f		2	1	1	3		3	8	6	8	4
9	4	9	6	8	9	3			2		
	2	2	1			0		1	1	0	8