

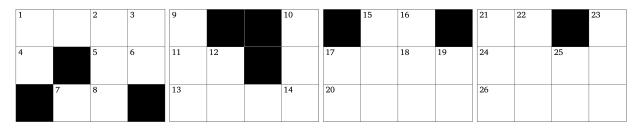
Box - Intermediate Puzzle #30

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** Eight hundred twenty-nine more than X26
- **5** Z13 divided by seventy-six
- 7 Z15 minus Y17
- 11 Y19 minus X5
- **13** Twice a prime number
- **15** Y9 minus Y12
- **17** Twice a prime number
- **20** Twice a prime number
- **21** Mean of Y10 and Y12
- **24** Six times a prime number
- **26** Three times a prime number

Y Direction

- **1** Y10 minus Z3
- 2 Mean of Z13 and X7
- **3** Z14 divided by Z3
- 9 X21 plus half of Z15
- 10 Z15 plus X7
- 12 X21 minus Y19
- 15 A prime number
- 16 Half of X24, then subtract X17
- **17** Mean of X5 and Y3
- **19** Two-thirds of Y25
- 21 One hundred sixty-five more than Y15 18 A square
- 22 Y9 plus Y23
- **23** A prime number
- **25** Twice the result of Y10 minus Y1

Z Direction

- **1** Y9 minus Y19
- **3** Three-fourths of Y19
- 4 Z6 minus X5
- **6** Six times a prime number
- 7 Y15 plus half of X20
- 8 Twice a square
- 12 Y23 plus X11
- **13** Fifty-two times a prime number
- 14 Three times Y16
- 15 Mean of X5 and Y9

Solution:

			2				1		6			8			
3			3					1							
	4	8		9	8	7	4	8	3	1	8	8	2	2	3