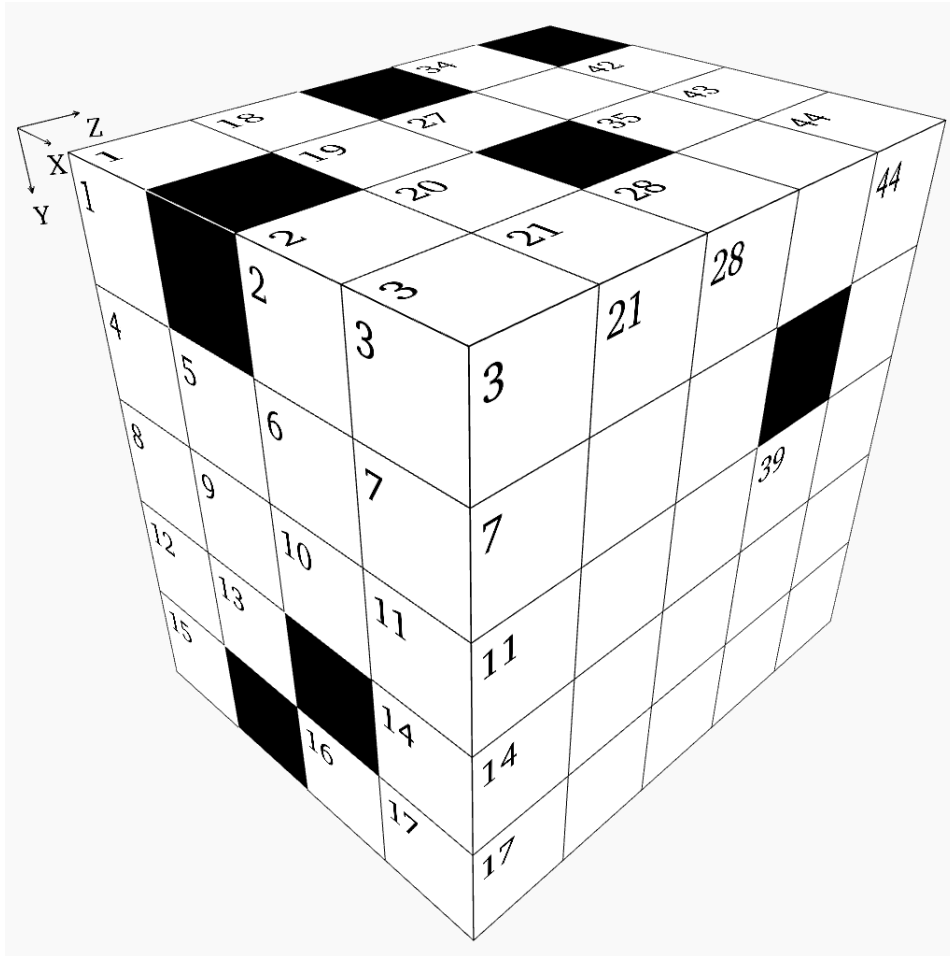


Box - Challenging Puzzle #26



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:

1		2	3	18	19	20	21		27		28
4	5	6	7	22				29			
8	9	10	11	23				30			
12	13		14	24		25		31		32	
15		16	17	26						33	

34		35			42	43	44
				45			
36	37	38	39	46			
40					47		
	41			48			

X Direction

- 2 X45 divided by Z10
- 4 Twice a prime number
- 8 A prime number
- 12 Twice Z35
- 16 Z10 plus Z35
- 18 Z3 minus Y21
- 22 Eleven times a square
- 23 Twenty-one times a prime number
- 24 Twenty-six times a prime number
- 26 Four hundred fifty-eight less than X46
- 29 A prime number
- 30 Y34 divided by seventy-nine
- 31 Ten times a prime number
- 33 Same as Y45
- 34 Last two digits are the same as last two digits of Z15
- 36 Y2 plus half of X47
- 40 Twenty-seven times a prime number
- 42 Y29 minus half of Z16
- 45 Sixty-five times a prime number
- 46 Sixteen times a prime number
- 47 Mean of X48 and Z5
- 48 Twice the result of X22 minus Y34

Y Direction

- 1 One thousand five hundred eighty-five more than Z14
- 2 Same as Z16
- 3 Z25 plus Z8
- 5 X23 minus X45
- 18 A prime number
- 19 A prime number
- 20 Y1 plus half of X46
- 21 Thirty-two times a prime number
- 27 Half of Z14, then subtract Y28
- 28 Three times a prime number
- 29 Twelve times a prime number
- 32 A square
- 34 Mean of X47 and X26
- 35 Twice a prime number
- 37 Fourteen times a prime number
- 39 X34 minus Y43
- 42 Ninety-six times a prime number
- 43 Thirteen times a square
- 44 A prime number
- 45 Three-fourths of X48

Z Direction

- 1 Same as X16
- 2 Half of Y35, then subtract X31
- 3 Rearranged digits of Z11
- 4 Sixty-two times a prime number
- 5 Twice the result of Z15 plus X12
- 6 Forty times a prime number
- 7 Rearranged digits of Y39
- 8 Sixty-three times a prime number
- 9 Fifty-eight times a prime number
- 10 Mean of Z2 and Z35
- 11 Mean of Y3 and X16
- 12 X8 plus Y37
- 13 Sixteen times a prime number
- 14 Twelve times a prime number
- 15 Three times Z41
- 16 Twelve times a prime number
- 17 Twenty-one times a prime number
- 19 A prime number
- 25 Forty-nine times a prime number
- 35 Z1 minus Z10
- 38 Z2 minus X48
- 41 Y5 divided by eight

Solution:

9	█	9	7	6	5	9	6	█	8	█	3
3	3	9	4	1	8	5	9	1	8	7	7
6	5	6	3	6	6	5	7	2	3	█	2
6	2	█	9	7	9	8	2	1	5	1	0
1	█	9	6	3	3	9	8	2	█	6	3

1	5	3	2	█	7	1	4
8	█	2	█	6	3	0	5
1	1	1	4	3	8	5	6
7	5	8	7	█	2	3	6
█	4	█	9	8	4	█	7