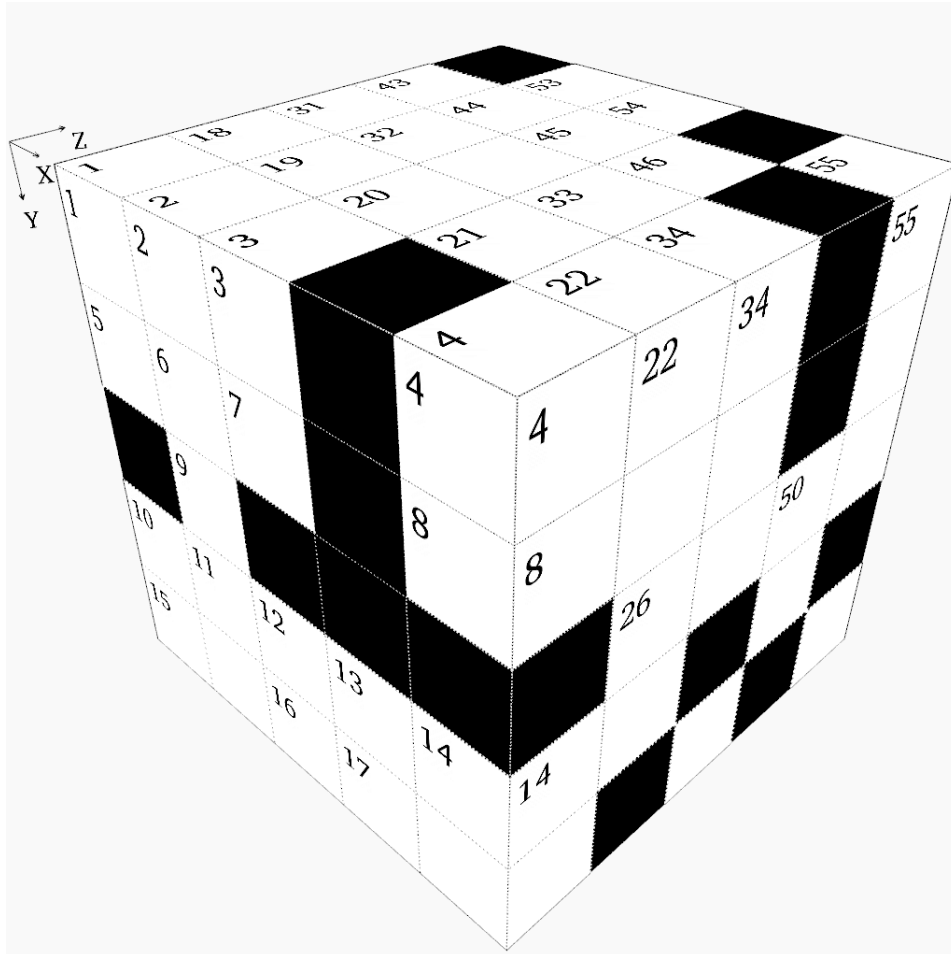


Difficulty: ★★★★★

Cube - Hard Puzzle #10



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:

1	2	3		4	18	19	20	21	22	31	32		33	34
5	6	7		8	23			24		35			36	
	9				25				26	37		38	39	
10	11	12	13	14	27		28	29		40				
15		16	17				30			41	42			

43	44	45	46			53	54		55
47		48				56			57
49				50		58			
		51				59			
52							60		

X Direction

- 1 Z16 plus X40
- 5 Z24 divided by X30
- 10 Six times a prime number
- 15 Three times a prime number
- 18 Y18 plus Z1
- 23 Y54 times Y13
- 25 Mean of Y55 and Y13
- 27 Three times a prime number
- 30 X40 minus Y4
- 31 Nine times a prime number
- 35 X1 minus X59
- 36 Y20 minus Y4
- 37 Y43 plus Y22
- 40 A cube
- 41 Its digits total Y4
- 43 A prime number
- 47 Twice a prime number
- 49 Last two digits are the same as last two digits of Z39
- 51 Seven times Y50
- 52 X40 plus Y28
- 53 Mean of Y34 and X36
- 56 Seven times a square
- 58 Forty-seven times X51
- 59 Same as Y10
- 60 Four times Z42

Y Direction

- 1 Z11 minus Y54
- 2 Twice the result of X58 plus Y14
- 3 X59 reversed
- 4 A square
- 10 Mean of X35 and Y20
- 12 Z24 divided by X5
- 13 X35 divided by five
- 14 A square
- 18 Seven thousand two hundred forty-seven less than Z10
- 19 Z15 divided by X40
- 20 X53 minus Y1
- 21 Y50 plus Y1
- 22 A prime number
- 28 Z12 reversed
- 29 X53 minus Y10
- 31 Twenty thousand eight hundred twenty-one less than X15
- 32 Four times a prime number
- 33 Y57 times Y1
- 34 X56 minus Z13
- 43 Forty-five times a prime number
- 44 Forty-six times Y12
- 45 Three times a prime number
- 46 Twice the result of Z6 plus X49
- 50 Z26 divided by Z48
- 53 Seven times a square
- 54 Twice a prime number
- 55 Mean of X60 and Y10
- 56 Y44 plus Z8
- 57 Nine times a prime number

Z Direction

- 1 Y54 plus Z21
- 2 Mean of X31 and Y45
- 3 A prime number
- 4 A square
- 5 A prime number
- 7 Same as Y20
- 8 Sixty times Y29
- 9 Fourteen times a prime number
- 10 Eighteen times a prime number
- 11 Z12 plus Y54
- 12 Y33 divided by Y57
- 13 Eighty-nine times a prime number
- 14 X35 minus X40
- 15 Thirty-nine times a square
- 16 Z48 plus half of X59
- 17 Three times a prime number
- 21 Fifty-three times Z12
- 24 X5 times Y29
- 25 Thirty-nine times a prime number
- 26 X36 times Z48
- 38 Six times a prime number
- 39 Twenty-five times Y28
- 42 X1 minus X35
- 48 Mean of Z42 and Y3

Solution:

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

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