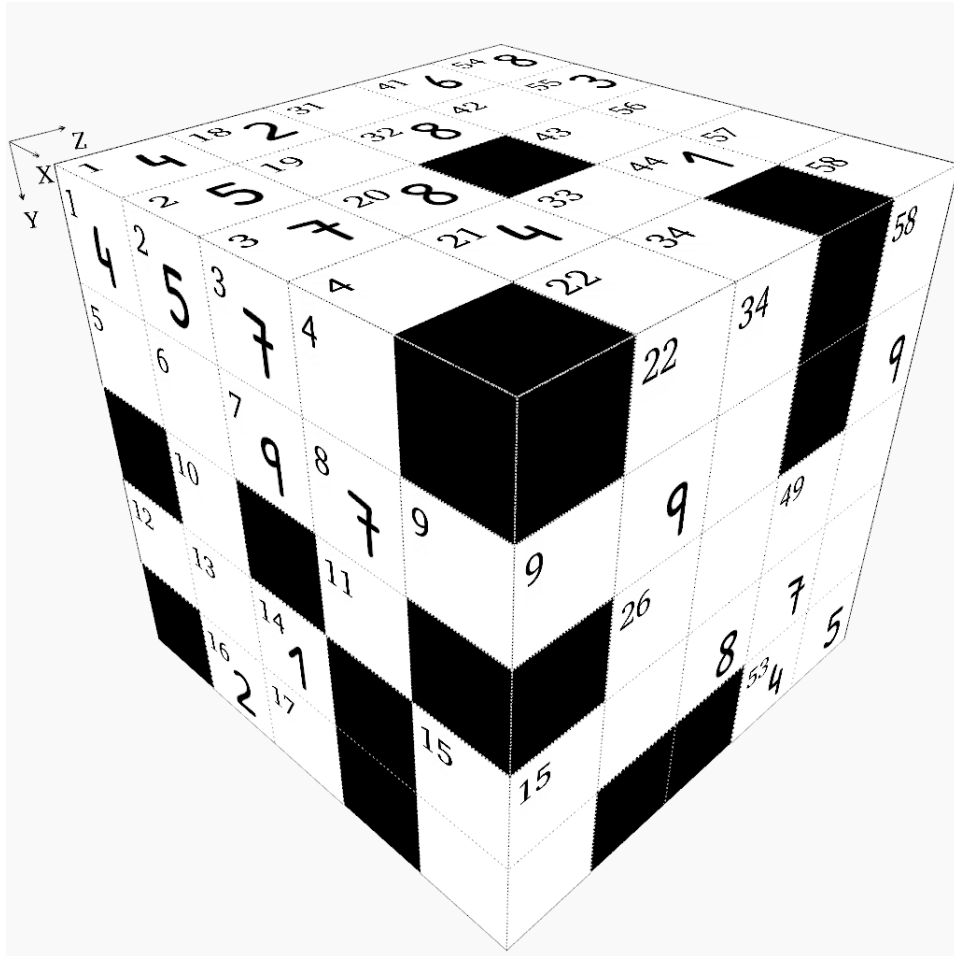


Difficulty: ★★★★★

Cube - Beginner Puzzle #5



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

41 6	42	43	44 1		54 8	55 3	56	57	58
45 9	5	46 9	47 3		59	2	9		9
48 6		6		49	60 1	3		61	
50	5			7	62 6	4	9		
51 1	52	4		53 4	63 9	5		64 1	5

X Direction

- 1 Nineteen times a prime number
- 5 Thirty-one times a prime number
- 12 Seven times Z7
- 16 Mean of X60 and Z22
- 18 One thousand six hundred ninety more than Z10
- 23 Thirty-three times a prime number
- 24 One thousand fifty-seven less than X54
- 27 Five thousand five hundred eighty-seven more than Y42
- 29 Eighty-six times X61
- 31 Seven times Y14
- 33 Mean of X50 and Z8
- 35 Y57 divided by Z16
- 36 Y34 plus half of X27
- 38 X16 minus X61
- 39 X35 plus Y15
- 40 Mean of X31 and Z3
- 41 A prime number
- 45 Fifty-three times a prime number
- 48 Fourteen thousand four hundred thirty more than Y2
- 50 Z47 minus Z16
- 51 Twice a prime number
- 54 Seventeen thousand six hundred two more than X48
- 59 Mean of X48 and Z25
- 60 Y1 minus Y56
- 61 Y37 divided by Z28
- 62 Fifty-nine times X38
- 63 X39 plus Y15
- 64 Y1 minus Y15

Y Direction

- 1 Z52 plus Y15
- 2 Its digits total X50
- 3 Z7 minus Y14
- 4 Y15 times Z28
- 14 X35 reversed
- 15 A cube
- 19 Mean of Y42 and Z30
- 20 Y54 plus Y1
- 21 Twice a prime number
- 22 Fifty-one times Z3
- 24 Sixty-seven times X61
- 31 Z4 minus half of Y14
- 32 X29 reversed
- 34 Sixty-one times X31
- 37 Z29 minus X12
- 41 Four thousand sixty more than Y42
- 42 A prime number
- 43 X16 plus Y4
- 44 Z7 plus X33
- 49 Twice a prime number
- 54 Nine times a prime number
- 55 Five times a prime number
- 56 Mean of X33 and X61
- 57 Z9 minus Y44
- 58 Z26 plus half of X54

Z Direction

- 1 Two thousand two hundred seventy less than Y21
- 2 Sixty-one times a prime number
- 3 Six times X61
- 4 Thirty-four times a prime number
- 6 X18 minus X41
- 7 Y44 minus Z53
- 8 Five times X64
- 9 Y4 plus Y15
- 10 A prime number
- 11 A prime number
- 12 Sixteen thousand fifty-three less than Y54
- 13 Y2 minus X31
- 14 Z22 minus X16
- 15 Four times a prime number
- 16 Mean of X64 and Y15
- 17 Eight times a prime number
- 22 Z16 plus Y14
- 24 A prime number
- 25 A square
- 26 A prime number
- 28 A square
- 29 Three times a prime number
- 30 Three times a prime number
- 35 Mean of Y14 and Y4
- 43 X39 plus X16
- 46 X16 plus Z8
- 47 A square
- 52 X33 divided by three
- 53 Mean of X50 and Z8

Solution:

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

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