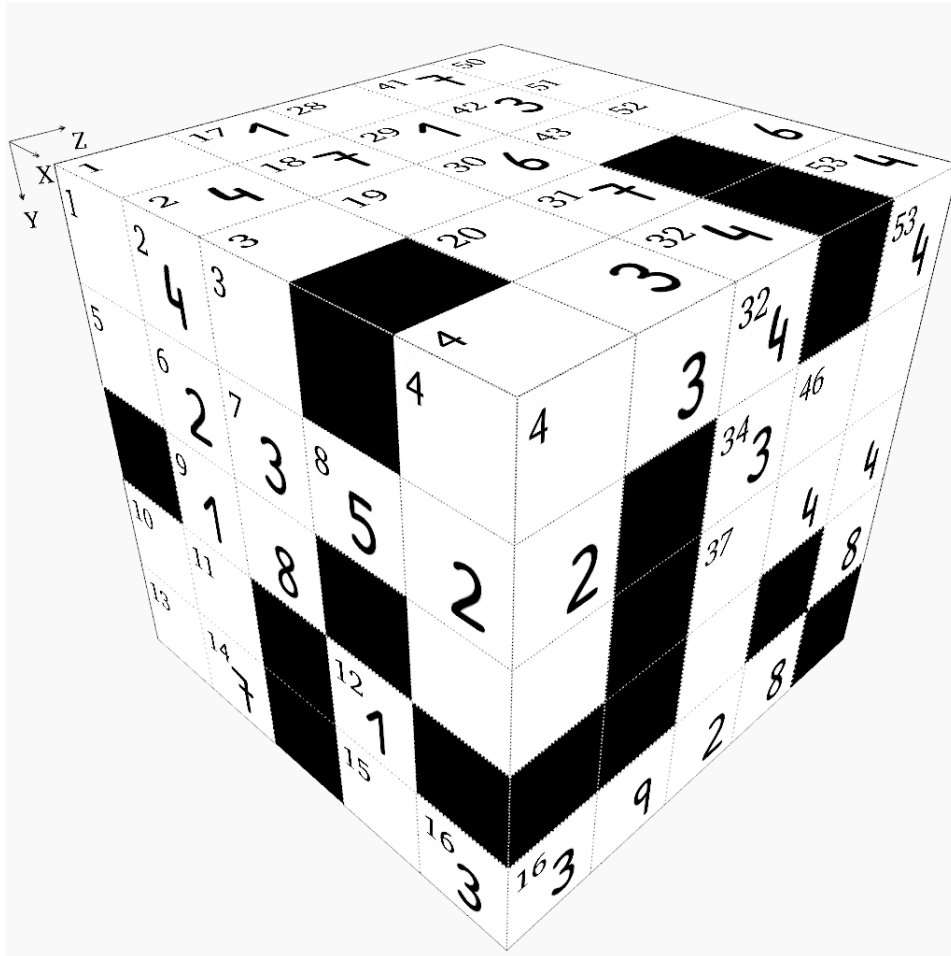


Difficulty: ☆☆☆☆☆

Cube - Beginner 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 cube pictured above and divide it into individual X-Y layers, we will get these planes:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
	4				2	3	5	2									1	7			3							1	6	7	4	
5																21		1									33				34	
																22				23								35	1	9	9	37
																24		1	9	8							38	8	4		39	
13																26				27	3	0	9				40	3	2			2

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

X Direction

- 1 X13 plus Y59
- 5 Sixty-four times a prime number
- 9 X15 minus Y59
- 10 Mean of X60 and X22
- 13 X22 plus Y55
- 15 X38 minus Y1
- 17 Seven times a prime number
- 21 A prime number
- 22 A square
- 24 Seventy-eight times a prime number
- 26 A prime number
- 28 Six times a prime number
- 33 A cube
- 35 A palindrome
- 38 X60 minus Y46
- 39 A square
- 40 Six hundred twenty-six more than Z7
- 41 Y4 minus Y38
- 44 Three hundred twenty-two more than X26
- 47 Seventeen thousand sixty-seven more than Y43
- 48 X1 times X10
- 49 Sixteen thousand fifty-one more than Y43
- 50 One thousand four hundred four less than X49
- 54 Y28 plus Y55
- 56 Half of Y4, then subtract X39
- 58 X60 minus Y38
- 60 Y1 plus X13

Y Direction

- 1 Z47 minus X38
- 2 Fifty-one times a prime number
- 3 Z20 times Y46
- 4 Z4 minus Y46
- 10 Y38 minus X58
- 12 X26 minus X40
- 17 First two digits are the same as Y1
- 18 Y41 plus Z9
- 19 X22 minus X58
- 20 Mean of Z3 and X13
- 25 Three times a prime number
- 28 Mean of Y59 and X58
- 29 Twenty-two times a prime number
- 30 X41 minus Y10
- 31 Seventy-nine times a square
- 32 Fourteen times a prime number
- 38 X56 minus Z34
- 41 A prime number
- 42 Ninety-six times a prime number
- 43 A prime number
- 45 One hundred forty-three less than Z23
- 46 Y3 divided by Y12
- 51 Y28 minus Y12
- 52 Thirty-three times Y1
- 53 Sixty-one times Y10
- 55 Mean of X13 and X58
- 57 Y59 times X9
- 59 Y57 divided by Y51

Z Direction

- 1 X5 minus Z36
- 2 Seven times a prime number
- 3 Five thousand four hundred sixty more than X17
- 4 Mean of Y59 and Z9
- 5 A prime number
- 6 Seven thousand two hundred sixty-four less than X40
- 7 Six hundred eighty-six less than Y42
- 8 A prime number
- 9 Y46 plus half of X24
- 10 Last two digits are the same as last two digits of X35
- 11 Seven thousand five hundred sixty-four more than Z10
- 12 Mean of X26 and Z23
- 13 Thirty-one times a prime number
- 14 Twenty thousand five hundred forty-three less than X49
- 15 Eighty times a prime number
- 16 Eight times a prime number
- 20 X26 minus X40
- 23 A prime number
- 27 Y52 minus X22
- 34 A prime number
- 36 Y57 minus Z20
- 37 Y25 plus Y55
- 47 Five times a prime number

Solution:

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

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