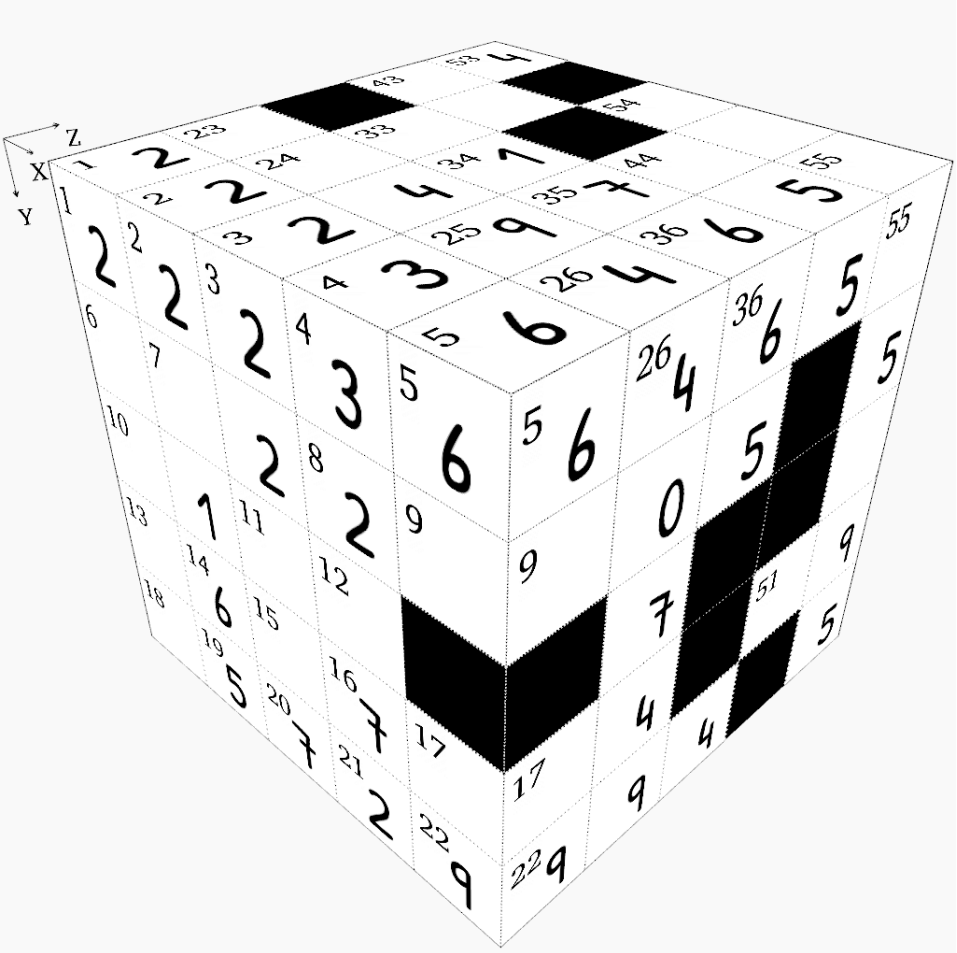
Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #3

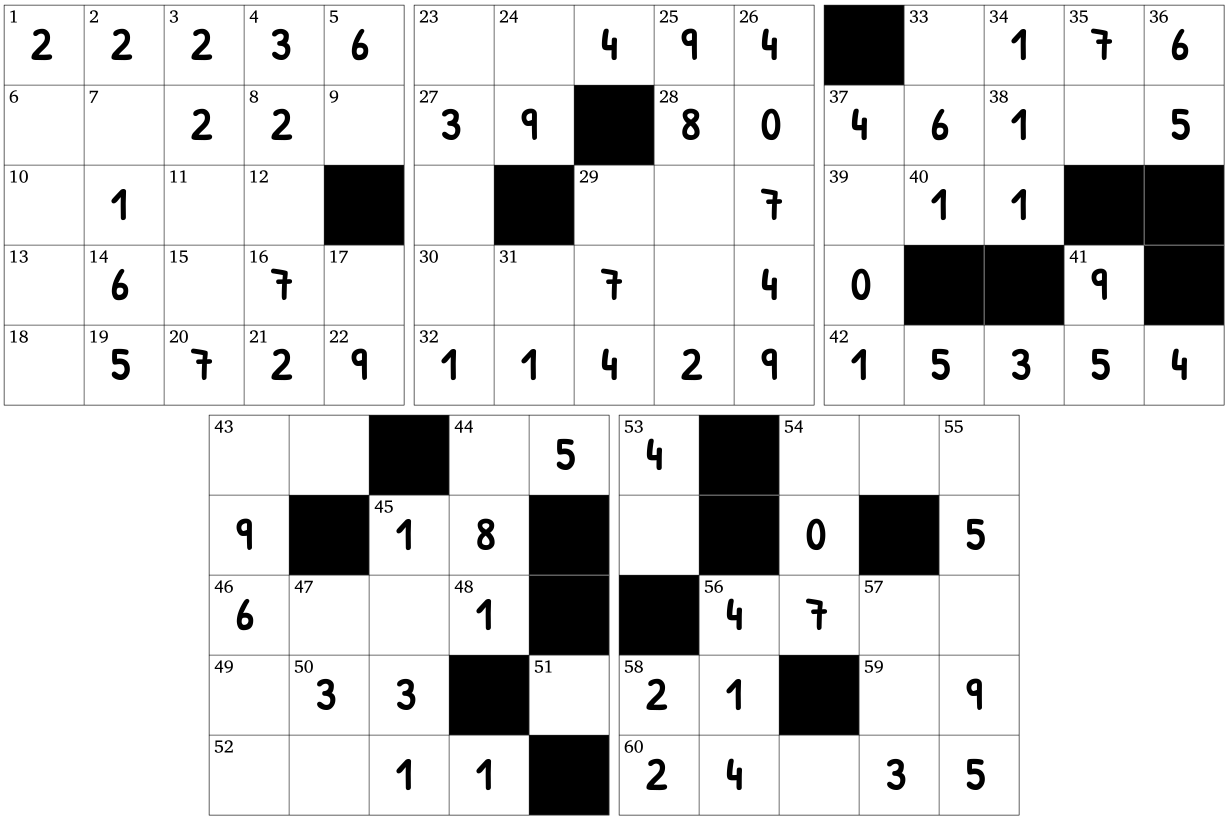


This puzzle is like a crossword, but with numbers. Each digit occupies a 3D block and can be a part of a "word" in the X,Y, and Z directions.

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:



X Direction

1 First two digits are the same as Y58
6 Last two digits are the same as last two digits of Z19
10 Z40 plus Y47
13 A prime number
18 Twenty-three times a prime number
23 Forty-two times a prime number
27 X45 plus Y31
28 X45 plus Z14
29 X39 plus half of Y47
30 Six times a prime number
32 Eleven times a prime number
33 Its digits total X58
37 Twenty-five times a prime number
39 Y54 minus Z7
42 Eighteen times a prime number
43 Same as Y41
44 Same as Y41
45 X44 minus Y35
46 A prime number
49 Thirteen times a prime number
52 One thousand three hundred more than X46
54 Two hundred nineteen more than Z16
56 Ten times a prime number
58 X43 minus Z17
59 Sum of digits in Z7
60 One hundred seventy more than Y2

Y Direction

1 X6 plus X46
2 One thousand six hundred fifty-two more than Z21
3 Ninety-three times a prime number
4 Thirty-two times a prime number
5 A square
17 Z38 minus Z50
23 A prime number
24 X28 minus X58
25 Twelve times a prime number
26 Five thousand four hundred twenty-six less than X37
29 Z16 plus X43
31 X28 minus Y24
33 Z16 minus X45
34 Z50 plus X28
35 Mean of Y24 and X44
36 Mean of Z48 and Y34
37 Twenty-seven times a prime number
41 Mean of Y34 and Y17
43 Twice the result of X23 plus X60
44 Z17 plus Y54
45 Twenty-nine times X27
47 Z48 plus Y57
53 Z10 minus X54
54 Z11 divided by Z50
55 Twenty thousand four hundred thirty-seven more than Z5
56 Twenty-three times X45
57 Y29 plus X27
58 Z51 minus Z15

Z Direction

1 Z51 minus Z15
2 Twenty-five times a prime number
3 Mean of Y35 and Z9
4 A prime number
5 Twenty-two times a prime number
6 Two thousand sixty-nine more than X32
7 Sixteen times Z50
8 Twice a prime number
9 Fifteen times Z15
10 Y36 plus Y44
11 Thirty-one times a prime number
12 Mean of X44 and X27
13 Four times a prime number
14 Y34 minus Z51
15 Sum of digits in Y55
16 Y29 minus Y41
17 X43 minus Y31
18 Eight thousand four hundred eight more than X30
19 Forty-four times a prime number
20 Nine thousand six hundred fifty-five more than Z5
21 X10 plus half of X30
22 Z14 plus Y47
38 Five times Z1
40 Last two digits are the same as last two digits of X23
43 Z51 reversed
48 Y41 divided by five
50 X44 minus Y5
51 Mean of Y17 and Z48

Solution: