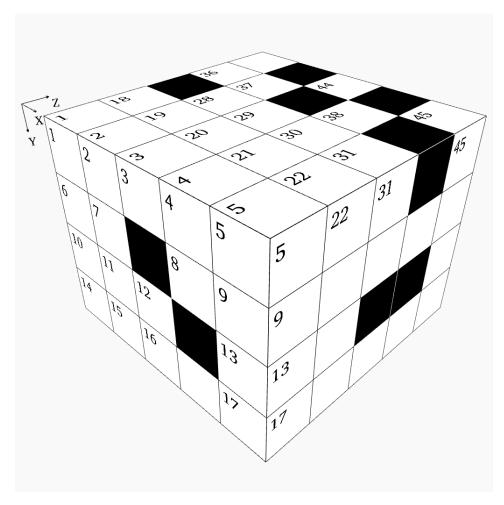


# **Box - Hard Puzzle #26**



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		4	5		1	8	19	20		21	22	2		28	29	30	31
6	7		:	8	9		2	3		24					32				
10	11	12			13	3	2	5				26			33				
14	15	16			17	7	2	7							34			35	
			36		37			38						44		4	5		
			39					40				1	46						
			41			4	2				47								
			43								48								

#### X Direction

- Twenty-five times a prime number
- Z4 minus X41
- 8 Z13 minus Y12
- A prime number
- Four times a prime number
- 18 X32 plus half of X25
- Six times a prime number
- Z36 plus Y29
- Y29 plus Z42
- A square
- Twenty-six times a prime number
- A prime number
- Z1 plus Z13
- Y46 times X27
- Y12 plus Y31
- Half of X46, then subtract Y37
- Y31 plus Z1
- Twice a prime number
- A prime number
- Sixteen times a prime number
- Twenty-four times a prime number
- One thousand four hundred twenty-one more than Z11

#### **Y Direction**

- A prime number
- 2 Six times a prime number
- Y20 minus X36
- Four times a prime number
- A square
- Mean of Y38 and Z2
- 19 Rearranged digits of X41
- Y21 minus X40
- X26 plus Y20
- 22 Twenty-six times a prime number
- 28 Y5 plus X8
- Y47 minus Y31
- 30 Thirteen times a prime number
- Mean of Y29 and Y42
- Twice a prime number
- Thirty-eight times a square
- Seventy-four times Z1
- 38 A prime number
- Y12 plus Z36
- Mean of Y30 and Y29
- Mean of Y22 and Y36
- 46 Thirty times Y4
- A square

#### **Z** Direction

- 1 Y46 divided by fifteen
- A prime number
- 3 Mean of Y32 and Y47
- Forty-one times Z13
- Twelve times Y31
- Four times a prime number
- Twice a prime number
- A prime number
- Thirteen thousand eighty-eight less than Z14
- 10 Mean of X23 and X28
- One thousand one hundred ten more than Z8
- X10 minus X25
- Forty-eight times a prime number
- 15 Nine thousand four hundred eighty-four less than Z14
- Ninety-three times a prime number
- Two hundred fifty-three more than X32
- Y4 plus X39
- Two hundred twelve more than X47
- Half of X14, then subtract X1
- 36 Mean of Y4 and X33
- X40 minus Y29

## **Solution:**

