

Puzzle of the Week

Sujiko Puzzle – 2

In a Sujiko puzzle, use each of the numbers from 1 to 9 once in the nine squares. The number in each circle must be the sum of the four squares that surround it.

$3+7+4+9 = 23$	<table border="1" style="border-collapse: collapse; text-align: center; width: 100px; height: 100px;"> <tr><td>3</td><td>7</td><td>1</td></tr> <tr><td>23</td><td>19</td><td></td></tr> <tr><td>4</td><td>9</td><td>2</td></tr> <tr><td>26</td><td>22</td><td></td></tr> <tr><td>8</td><td>5</td><td>6</td></tr> </table>	3	7	1	23	19		4	9	2	26	22		8	5	6	$7+1+9+2 = 19$
3	7	1															
23	19																
4	9	2															
26	22																
8	5	6															
$4+9+8+5 = 26$		$9+2+5+6 = 22$															

THE CHALLENGE: Fill in this Sujiko puzzle.

2	8	
13	17	
	4	
18	22	

1 3 5 6 7 9

Puzzle of the Week

Sujiko Puzzle – 2 – Notes

THE CHALLENGE: The upper right 2 by 2 corner has three of the four squares filled in, so that is the place to start. The three squares filled in, (2 8 4), add up to 14. To make the sum of the four squares equal to 17 (in the circle), we need the central square to be $17 - 14 = 3$.

The smallest and largest numbers are often good places to start. For the bottom right 2 by 2 corner, the two numbers we have, (3 4), plus the two missing numbers must add up to 22. So, the missing two numbers on the right side of the bottom row add up to 15. We can get 15 as the sum of $6 + 9$ or $7 + 8$. However, the 8 is not available, so they must be $6 + 9$.

Let's look at the bottom left 2 by 2 corner. On the right side of that corner we will either have $3 + 6$ or $3 + 9$. If it were $3 + 6$, we would need two more numbers that add up to 9 and those are not available. So it must be $3 + 9$. The remaining two numbers in that bottom left corner must add up to 6, and the only possible way to do that is with $1 + 5$.

The only unused number at this point is the 7, so it must go in the upper left corner.

Three of the four numbers in the upper left 2 by 2 corner are (7 2 3), so the remaining number must be 1.

At this point we have the complete solution! Here it is row by row:

(7 2 8)

(1 3 4)

(5 9 6)