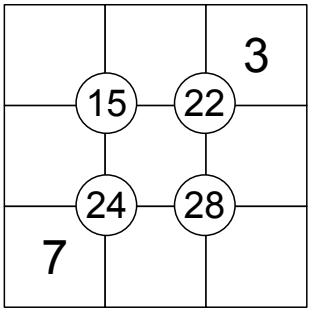
Sujiko™

solving notes / tips & hints.

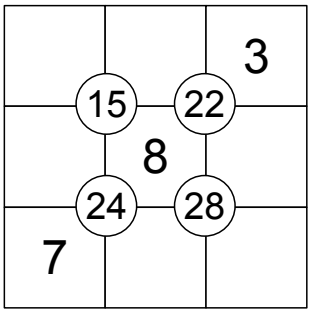
Jai Gomer

Starting point



Solve

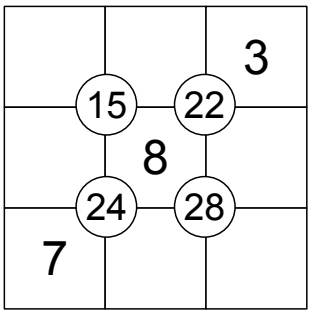
To find the central number : add together the top left quadrant, and the lower right. Add to that the numbers in the two remaining corners. This will give us the total for all of the numbers on the playboard, with one overlap – the central space. As we know that numbers 1 to 9 total 45, whatever amount over 45 is reached by totalling the numbers is the content of the central space.



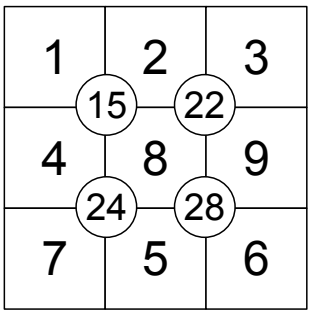
15 + 28 + 7 + 3 = 53

53 – 45 = 8

The content of the central square is 8.



To find the corner totals from the central square : add together the top right quadrant and the lower left, and take away the content of the central square. The difference between this total and 45 is the total of the top left and bottom right squares.



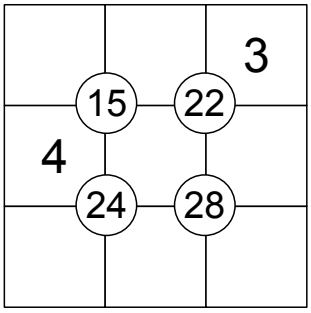
(22 + 24) – 8 = 38

45 – 38 = 7

The total of the two remaining squares is 7 : 6 + 1 or 5 + 2 (with only 5 or 6 able to fit in the bottom right square, leaving 1 or 2 in the top left).

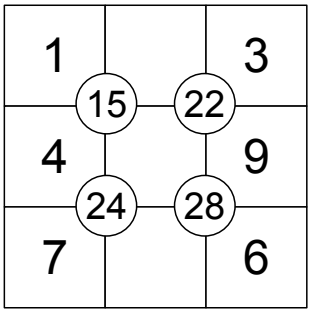
(Personally, my next train of thought would be : as only 7 remains in the upper left Q, the numbers must be 1, 2 and 4, leaving 5, 6 and 9 in the lower right. The only one of these numbers which will fit in the centre right square is the 9, as the two remaining spaces in the upper right Q must total 11 : 9 + 2. The lower left Q requires 9 : only 5 + 4 is possible, so the bottom right square must be 6, and the top left = 1.)

Starting point

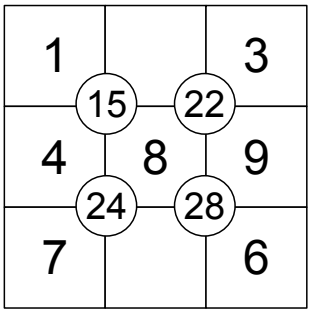


Solve

To find the relationship between numbers using 'common spaces' : the remaining total in the upper left Q is 11 (15 – 4), and the remaining total in the upper right Q is 19 (22 – 3). The blank spaces in these two quadrants are joined by two common spaces : centre top, and centre. This means that the remaining space in each Q must have the same difference as the difference in their individual totals. In this case, the difference in totals (19 – 11) is 8. Therefore, the number in the centre right square is 8 more than the number in the top left square. The only possible numbers are 1 and 9.



By continuing this process (24 – 4 = 20; 28 – 9 = 19), we see that the bottom left square is 1 more than the bottom right (8/7, 7/6, 6/5). 8/7 is not viable, as for the 7 to appear in the lower right Q would require a remainder of 12 to be filled, which would not be possible; 6/5 is not viable, as this would require a remainder of 14 to be filled, which would not be possible – therefore, the solution is 7/6.

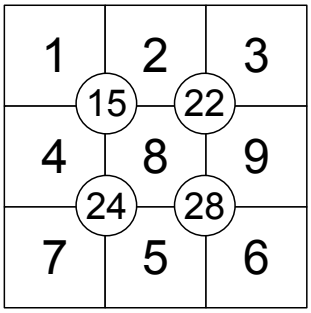


Top right Q + bottom left Q plus remaining corners :

22 + 24 + 1 + 6 = 53

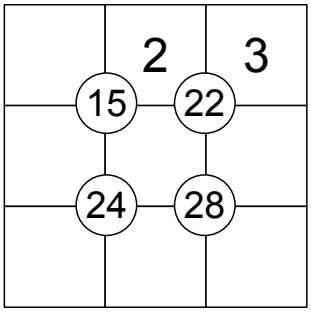
53 – 45 + 8

The central square = 8.



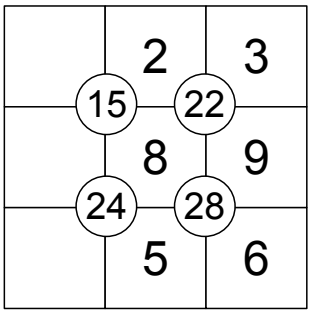
The remaining two spaces are easy to finish...

Starting point

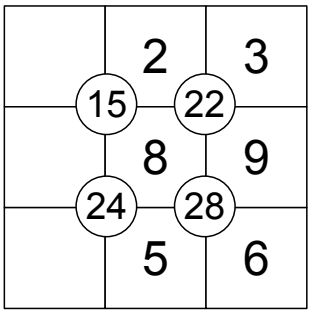


Solve

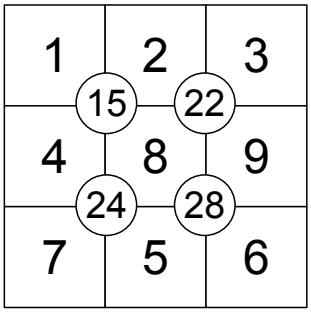
Breaking the grid using pairs : the remaining squares in the upper right Q = 17 (only 9 + 8 : the 9 cannot be the centre square, as the upper left Q would require 4 to complete, which is not possible, so 8 must be centre, and 9 is on the right)...



which means that bottom two squares of the lower right Q = 11 (7/4, 6/5 : 7/4 is not viable, as the 4 is needed to complete the upper left Q, so the solution is 6/5 : the 6 cannot be in the centre, as the lower left Q would require 10 to complete, so the solution is 5/6).



The remaining numbers (1, 4 and 7) must be arranged to complete the totals for both left Q's (5 and 11)...



...like so.

Number tips & hints :

Extreme nodal numbers : 30 = 6 + 7 + 8 + 9
29 = 5 + 7 + 8 + 9
10 = 1 + 2 + 3 + 4
11 = 1 + 2 + 3 + 5

Number totals : 3 = 1 + 2
4 + 1 + 3
16 = 7 + 9
17 = 8 + 9

All of the tips here can be used in conjunction with one another, to allow the player to break apart the grid, and to see the relationships between various numbers.

There will be other methods available to work out number relationships and positions, which hopefully will be discovered by individual players over time.