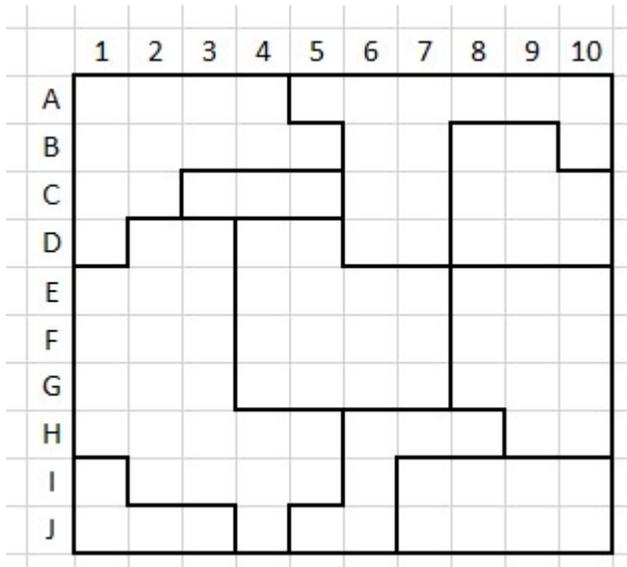
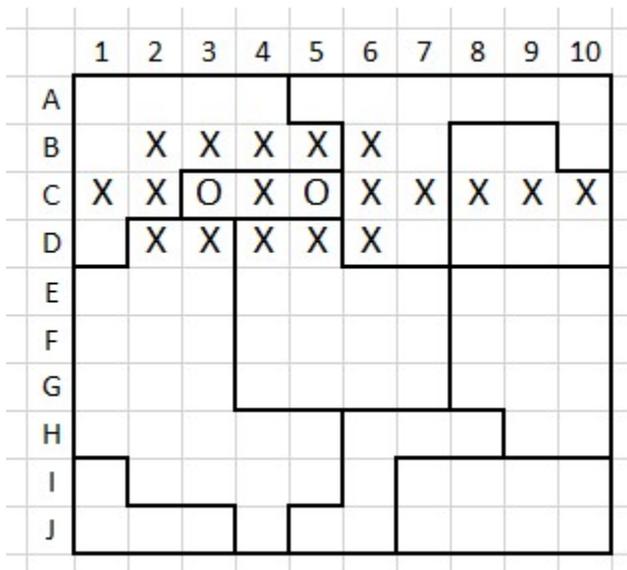


Initial Puzzle



The only way the two O's in the small rectangle can fit without touching is in cells C3 and C5. Then X out the other squares in row C and all bordering cells to either O.



Rows I and J must contain a total of four O's. The two shapes in the lower left and lower right must both contain two O's each. Since these are confined to rows I and J, the rest of those rows can't have any O's and can be X'd out.

	1	2	3	4	5	6	7	8	9	10
A										
B		X	X	X	X	X				
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E										
F										
G										
H										
I		X	X	X	X	X				
J				X	X	X				

In the piece that extends from J5 to H8, the only way to fit in two O's are in cells H6 and H8. Then X out the rest of row H and bordering squares to the O's.

	1	2	3	4	5	6	7	8	9	10
A										
B		X	X	X	X	X				
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E										
F										
G					X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I		X	X	X	X	X	X	X	X	
J				X	X	X				

There are two places only to put O's in row I, in I1 and I10. Then, X out bordering cells.

	1	2	3	4	5	6	7	8	9	10
A			X							
B		X	X	X	X	X				
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X							
F			X							
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X			X	X

The only other place to put an O in the lower left piece is in cell J3. There is already another O in C3, so X out the rest of column 3.

	1	2	3	4	5	6	7	8	9	10
A			X							
B		X	X	X	X	X				
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X							
F			X							
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X			X	X

Between columns 8, 9, and 10 there must be six O's. Two must be in the shape containing B8. Another two in the shape containing E8. There are already two more in H8 and I10. So, there can't be any more anywhere else in those three columns, so X them out. There is only one other place to put a O in the shape in the lower right, in J7, so put it there.

	1	2	3	4	5	6	7	8	9	10
A			X					X	X	X
B		X	X	X	X	X				X
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X							
F			X							
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

Columns 1 and 2 must have a total of four O's. There is already one in I1. There must be two in the piece containing E1. So, there must be one in the upper left piece somewhere in columns 1 and 2. The other O in that piece can only be in A4. Then, X out the bordering cell at A5.

	1	2	3	4	5	6	7	8	9	10
A			X	O	X			X	X	X
B		X	X	X	X	X				X
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X							
F			X							
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

Columns 4 and 5 must contain 4 O's. There are already two in A4 and C5. The other two must be in the piece containing E4. Thus, we can X out the rest of that piece.

	1	2	3	4	5	6	7	8	9	10
A			X	O	X			X	X	X
B		X	X	X	X	X				X
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X			X	X			
F			X			X	X			
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

There is one place only to put the other O in column 6 – A6. That is the second O in row A, so X out the rest. X out the cell at B7, because it borders the O in A6.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B		X	X	X	X	X	X			X
C	X	X	O	X	O	X	X	X	X	X
D		X	X	X	X	X				
E			X			X	X			
F			X			X	X			
G			X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

Row B needs two O's. They can't both be in B8 and B9, because they border. Thus, one must be in B1 and the other in B8 or B9. There are now two O's in column 1, so X out the rest of it.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X			X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X				
E	X		X			X	X			
F	X		X			X	X			
G	X		X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

The shape containing E1 still needs two O's. With only three empty cells left, they must be in E2 and G2. Then, X out F2.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X			X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X				
E	X	O	X			X	X			
F	X	X	X			X	X			
G	X	O	X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

The shape that contains E8 still needs two O's. One can't be in F9 because it borders every other available cell. If it had an O, it would be impossible to place another one. Thus, by contradiction, it must have an X.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X			X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X				
E	X	O	X			X	X			
F	X	X	X			X	X		X	
G	X	O	X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

Let's look at columns 9 and 10, which must have four O's. There are already two in B9 and I10. One must be in either D9 or D10. The other must be in E10, F10, or G10. The piece containing E8 still needs one more O besides the one in column 10, so it must be in F8. X out ordering cells in E8 and E9.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X	X	O	X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X	O	X		
E	X	O	X			X	X	X	X	
F	X	X	X			X	X	O	X	
G	X	O	X		X	X	X	X	X	
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

The piece containing cell D4 still needs two O's. They can't both be in cells E4, E5, F4, and F5, because they would border. Thus, one of them must be in G4. Then X out bordering cells F4 and F5. The O in G4 also completes row G, so X out G10.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X	X	O	X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X	O	X		
E	X	O	X			X	X	X	X	
F	X	X	X	X	X	X	X	O	X	
G	X	O	X	O	X	X	X	X	X	X
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

There is only one place left to put the other O in row F, in F10. That completes column 10, so X out the rest.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X	X	O	X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X	O	X		X
E	X	O	X			X	X	X	X	X
F	X	X	X	X	X	X	X	O	X	O
G	X	O	X	O	X	X	X	X	X	X
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X

The rest is easy. The only other place to put an O in column 9 is D9. We should have already X'd out E4, because column 4 has two O's. The only other place to complete row E and column 5 is E5.

	1	2	3	4	5	6	7	8	9	10
A	X	X	X	O	X	O	X	X	X	X
B	O	X	X	X	X	X	X	X	O	X
C	X	X	O	X	O	X	X	X	X	X
D	X	X	X	X	X	X	O	X	O	X
E	X	O	X	X	O	X	X	X	X	X
F	X	X	X	X	X	X	X	O	X	O
G	X	O	X	O	X	X	X	X	X	X
H	X	X	X	X	X	O	X	O	X	X
I	O	X	X	X	X	X	X	X	X	O
J	X	X	O	X	X	X	O	X	X	X