Draw a path in both grids that passes through every shape exactly once.
Where the route passes through identical shapes the path must look the same.


## Now we know the rules, let's try and solve this puzzle ...



Look at the "L" shaped block in the first grid for example. Because some of the edges in this shape lie along the edge of the grid we know that the path can not enter the shape from this direction.

Because this shape is asymmetical we can identify these edges in the second grid and apply this knowledge to help us block edges - as shown by the small red squares.


By blocking places where the path can not go we can find routes where the path MUST go.

Take a look at the second grid. The path enters at the bottom right and after our work in stage A we now know that the path can not go upwards.

We can therefore extend the path in this grid as shown by the purple line.


C We can also eliminate whole squares in grids to show that the path may not pass through.

The rules of the puzzle state that each shape must be visited exactly once. This means that as soon as the path has passed in and out of a shape we can eliminate all squares in that shape that do not have a path.

The " $T$ " shape in both grids is complete so we can eliminate squares as shown by the large red squares.


## Solving puzzle continued ...


(D)
"Dead ends" are also something to look out for as these squares can be eliminated.

A dead end is a square that only has one possible route for the path to take. There are examples in both grids and they have been eliminated as large orange squares.


One technique we have not directly used yet is to take advantage of the rule that the path must look the same when passing through identical shapes.

Take a look at the shape made from the single square (light green).
Notice that in the second grid the path passes straight through the shape?

This means that it must do the same in the first grid.
In the same way we can draw part of the path in the "L" shape.
The path has been extended as shown by the purple lines.


## Solving puzzle continued ...



Let's take a look at the path we just extended through the single square in the first grid. Notice that it enters the 2 -square shape through one of the ends (shown as a green square).

If we examine the 2 -square shape in the second grid we can see that one of the ends is blocked.

This means that we must draw a path entering this shape from the unblocked end.

This is shown as a purple line in the puzzle opposite.


One other thing to look for is shapes that have an entry and exit path drawn in.

The path in these shapes can be completed immediately and any unused squares can be eliminated.

See the purple lines and large orange blocks in the first grid.


Using these techniques you should now be able to fill in the rest of the puzzle.

Look at the " $U$ " shape in the first grid, it has a complete path that can be applied to the second grid. Indicated by the purple line.

The "L" shape in the first grid can now be completed, the path goes straight through it. Indicated by the orange line. Note that this completes the path in the first grid.

Finally we can finish off the puzzle by looking at the way the path moves through the 2 -square shape. Indicated by the green line.


Congratulations, you have just solved your first Tiktaka.

