

▼ LADYBUG IN HIDING

The leaves can be considered as nodes (points) of a graph. If a leaf has an even number of boundary crossings (overlaps with other leaves), the ladybug can enter and leave it, whereas a leaf with an odd number of boundary crossings can be entered and left by the ladybug but, when it finally reenters, it cannot leave again.

Observing the leaves, the only leaf with an odd number of crossings is the leaf under which the ladybug ends its journey and hides. Drawing a line through all the leaves that have only two crossings, and

marking the multiple crossed leaves, you can easily complete a continuous line through all of the leaves, never retracing the line.

In general, a maze like this can be traversed if only 0 or 2 of the leaves have an odd number of adjacent leaves. If it's "0," you can start anywhere because it's a closed loop. If it's "2," those two leaves are the start and finish points. That's what we have in this case—the start point has one adjacent leaf, and the finish point has three adjacent leaves. All the others have even numbers of adjacent leaves.

