## Example of a closed Euler path

The standard examples of a graph with a closed Euler path are the boundaries of $\boldsymbol{n} \boldsymbol{-}$ sided polygons.


However, there are also other examples, and the simplest is the BOW TIE GRAPH shown below:


There is an obvious Euler path (Upper Left) to (Lower Right) to (Upper Right) to (Lower Left) to (Upper Left). This path covers each edge exactly once, but it goes through the vertex in the middle twice.

