I. Try these!

For each graph, try to find a path that covers each edge exactly once (without retracing) and starts and ends at the same vertex. (The official name for this is an *Euler circuit*).

If you can't find one of those, try instead to find a path that covers every edge exactly once, but might start and end at different vertices. (This is called an *Euler path*.)

Note: Only the labeled dots represent vertices. If you begin traveling on an edge, you must continue on to the next vertex.





Graph 3.



Graph 4.





II. Some Graph Terminology

graph

loop

degree of a vertex (also called valence)

multiple edges

path

Euler path

circuit

Euler circuit

connected/component

simple graph

tree