## 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 1.


## Graph 2.



## 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

