

## Concept – Traversable Graphs

A traversable graph is one which has a \_\_\_\_\_

Once you have established if a graph is traversable there are a couple of different things you can look for.

A Eulerian trail \_\_\_\_\_

A Eulerian circuit \_\_\_\_\_

Even if a graph is not traversable, it may have a Hamiltonian path or cycle.

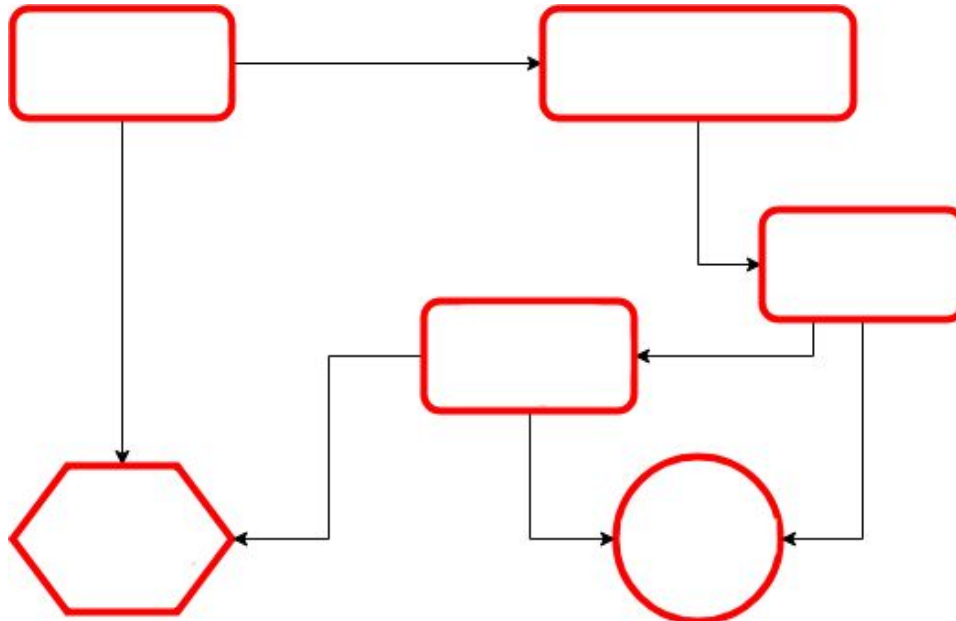
A Hamiltonian path \_\_\_\_\_

A Hamiltonian cycle \_\_\_\_\_

Eulerian trails and circuits are concerned with \_\_\_\_\_ whereas Hamiltonian paths and cycles are about \_\_\_\_\_

### How to

One way to see if a graph is traversable is with trial and error. However it is often quicker and easier to follow this flowchart.



### Worked Example

Find two graphs, one which is traversable and identify a Eulerian trail and circuit, and one which is not traversable but has a Hamiltonian path and/or cycle.