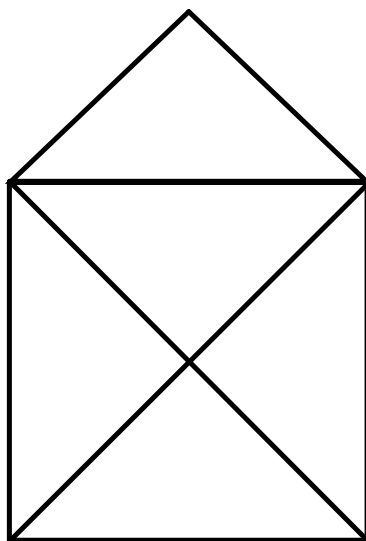


Sha-llenge!

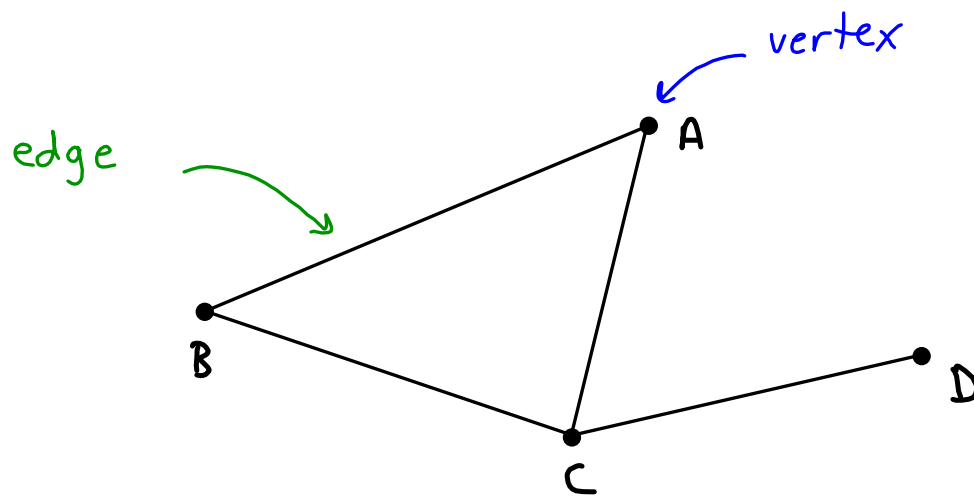


Can you draw this shape without lifting your pencil and without drawing over the same line twice?

GRAPH THEORY

Goal:

- to become familiar with the concept of graph theory
- to be able to identify vertices, edges and paths
- to be able to determine the degree of a vertex



A point is called a vertex.

A line is called an edge.

The number of edges that lead to a vertex is called the degree of the vertex.

$$\text{degree of } A = 2$$

$$\text{degree of } B = 2$$

$$\text{degree of } C = 3$$

$$\text{degree of } D = 1$$

A path is a sequence of edges.

A Euler path passes through every edge exactly once.