TU SMILE: Graph Theory Worksheet

**Exercise 1**

An Euler path is a path that passes every edge without repeating the edge.

An Euler cycle is an Euler path that starts and ends on the same vertex.

**Exercise 2**

First graph: The graph has both an Euler path and an Euler cycle

Second graph: There is an Euler path but not an Euler cycle

Third graph: There is an Euler path but not an Euler cycle

Fourth graph: The graph has both an Euler path and an Euler cycle

**Exercise 4**

Here is an example: