Graph Theory: Euler Circuit

Key words:

1. Degree
2. Tree
3. Euler Circuit
4. Connected

1. Prove the following Theorem:

   Theorem 1 *A non-trivial connected graph has an Euler circuit if and only if each vertex has an even degree. A connected graph has a Euler trail from a vertex* x *to a vertex* $y \neq x$ *if and only if* x *and* y *are the only vertices of odd degree.*

2. Describe the problem of Königsberg bridges.

Mathematician in Focus Leonhard Euler.