

Riddle 10

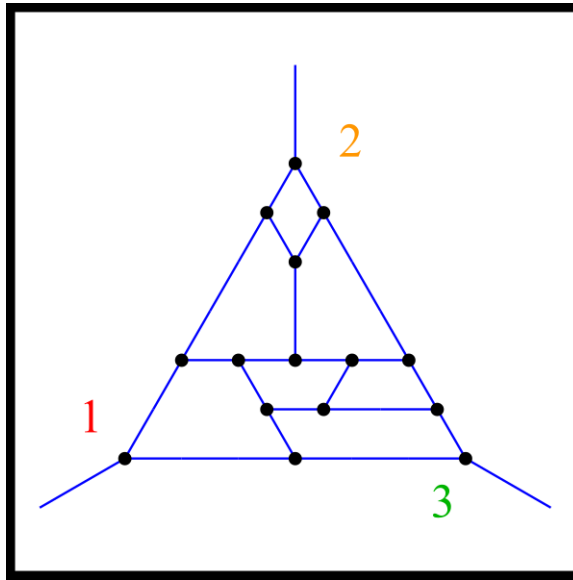


Figure 1:

A *Hamiltonian path* through a graph is a path passing through all of the graph's vertices precisely once each.

a) For the depicted cycle system, find a Hamiltonian path from 1 to 2. And another from 2 to 3.

b) Prove that there is not however a Hamiltonian path from 1 to 3.