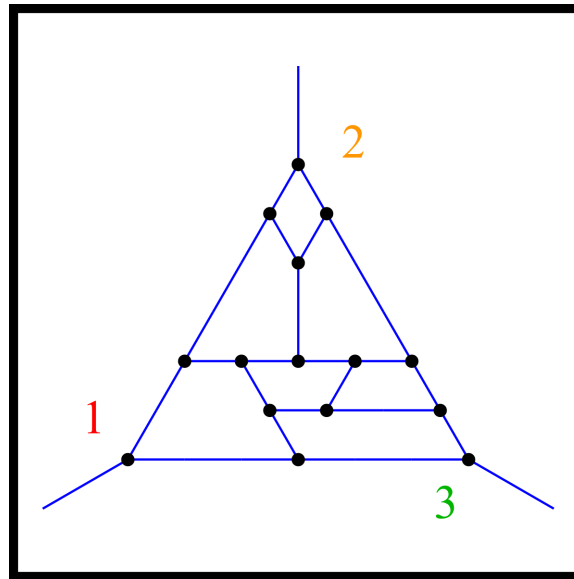


Riddle 10



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 .