讨论与反馈

2014/11/26

6.4

- Giving examples on G and G's complement.
  - Both G and G' are Eulerian
  - G is Eulerian, but G' is not
  - Neither G nor G' is Eulerian and Both contain an Eulerian trail.
  - Neither G nor G' is Eulerian, but G contains an Eulerian trail and G' does not.
  - G contains an Eulerian trail and an edge e such that G-e is Eulerian.

6.6

- Let G be a connected regular graph that is not Eulerian. Prove that if G' is connected, then G' is Eulerian.

6.10

- Let G be a 6-regular graph of order 10 and let u,v are vertices. Prove that G, G-v and G-v-u are all Hamiltonian.

6.12

- Let G be a 3-regular graph of order 12 and H be a 4-regular graph of order 11.
  - Is G+H Eulerian?
  - Is G+H Hamiltonian?

6.20

- Let G be a graph of order >= 3 having the property that for each v, there is a Hamiltonian path with initial vertex v. Show that G is 2-connected (connected, order >=3, and no cut vertices) but not necessarily Hamiltonian.