## **Quiz #1 possible questions**

- 1. Given a small graph,
  - a. find its transitive orientation;
  - b. find a chordless cycle of length >3;
  - c. draw its complement;
  - d. draw its induced subgraph on a given subset of vertices;
  - e. find an asteroidal triple in it;
- 2. Given a small graph,
  - a. show it is interval by providing an interval model;
  - b. or, show that it is not an interval graph by providing an obstacle for that (a large chordless cycle, an asteroidal triple, or its complement is not transitively orientable).
- 3. Given an interval graph with its umbrella-free ordering, find
  - a. its largest clique;
  - b. its proper coloring;
  - c. its largest independent set.

Date: Wednesday, February 10, 2016 in class.

