

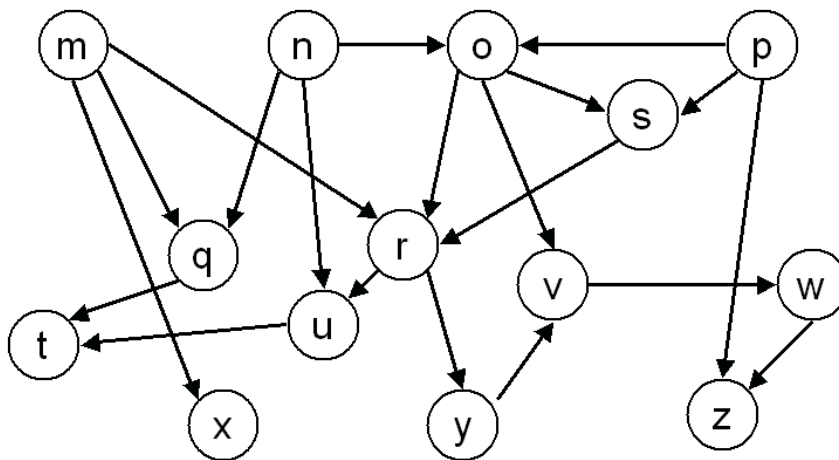
# Algorithm Analysis

## Handout 6

### Deadline December 1

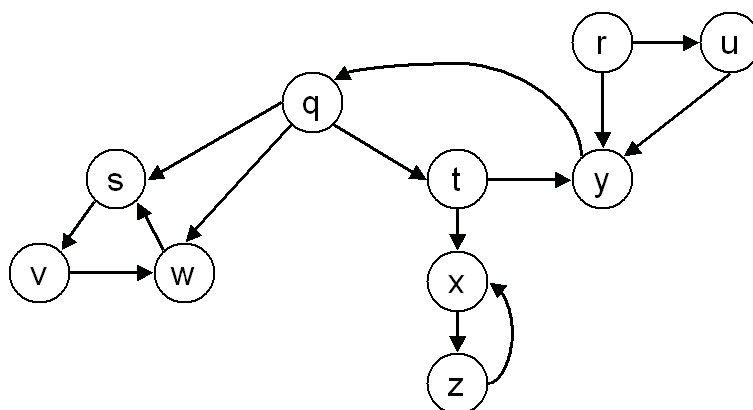
#### Exercise 6.1

Show the ordering of vertices produced by TOPOLOGICAL-SORT when it runs on the following DAG:



#### Exercise 6.2

Show how the procedure STRONGLY-CONNECTED-COMPONENTS(G) (textbook page 617) does work on the following graph:



Use figure 22.9 on page 616 in the textbook as template.

#### Exercise 6.3

How can the number of strongly connected components of a graph change, if a new edge is added?