

## Homework #6

(Due on 12:00am, Thursday, Dec 3, 2009)

**What is the difference between broadcast routing and multicast routing?**

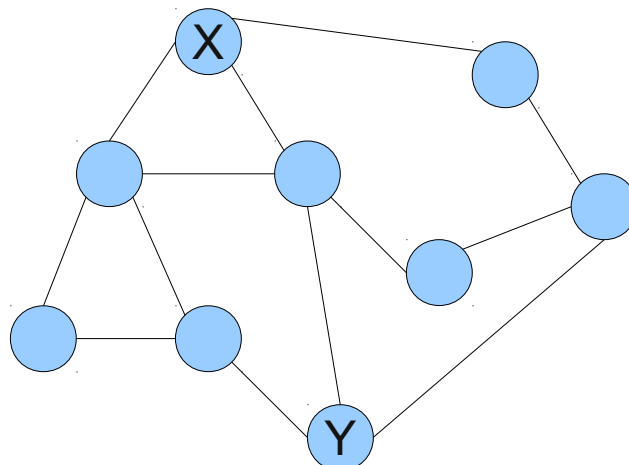
**What are the different methods for packet duplication in multicast routing?  
Explain the advantages and disadvantages.**

**Briefly explain the following concepts of multicast routing:**

- (Minimal) Spanning tree
- Shortest path tree
- Source-based tree
- (Group-) Shared tree
- Reverse path forwarding
- Center-based tree

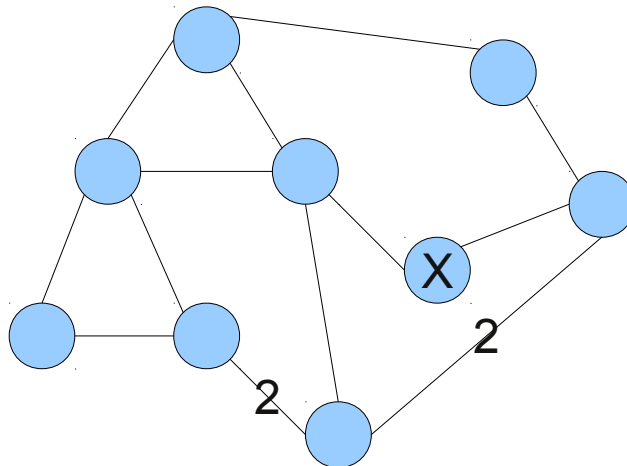
**Given the following network, use Reverse Path Forwarding to create a distribution tree with router X as the source. What happens if router Y does not have any attached nodes that are interested in the multicast data?**

You can assume that all links have the same weight.



**Given the following network, create a center-based using router X as the center.**

Unless noted otherwise, all links have a weight of 1.



**Compare the two multicast distribution scenarios in Protocol Independent Multicast (PIM).**

**Explain three basic approaches to mobility. Name their advantages and disadvantages.**

**Name the entities involved in a mobility scenario using Mobile IP and briefly explain their function.**

**How does a mobile node discover a mobility agent in it's current network and how can it obtain a care-of-address?**