

CMSC 341

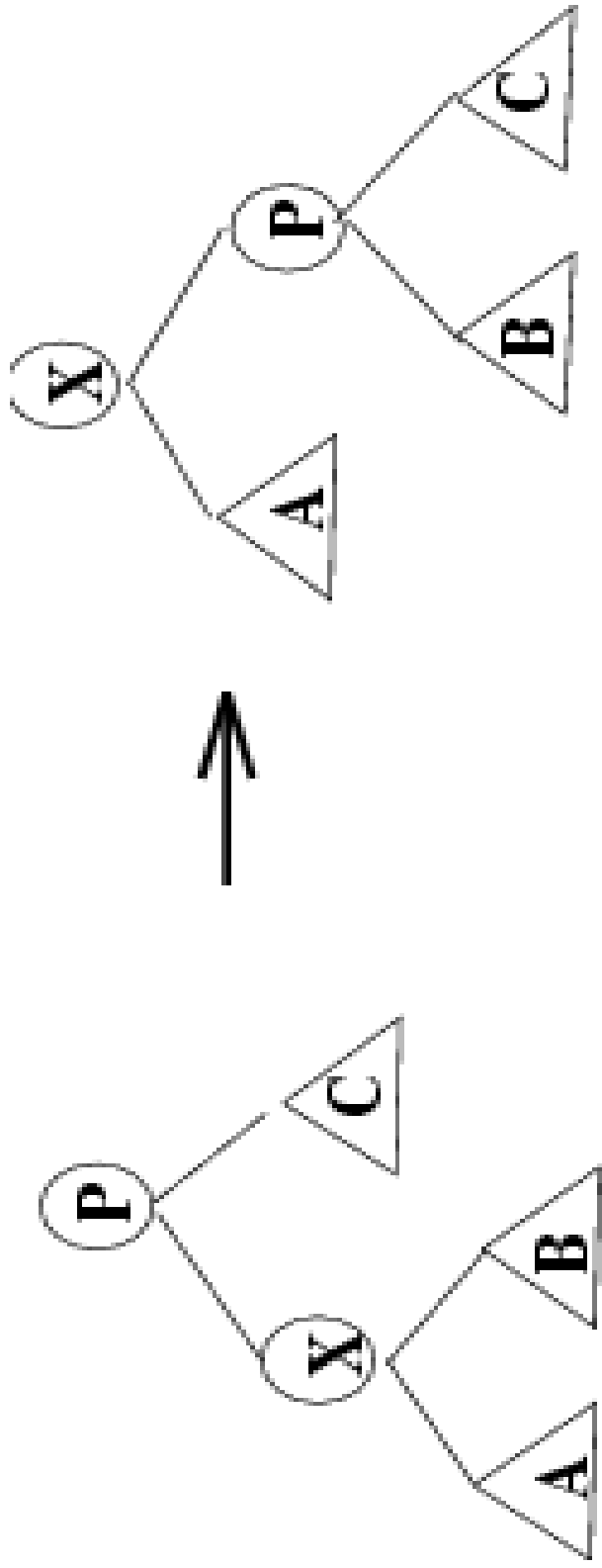
Splay Tree Diagrams

Bottom-Up Splaying

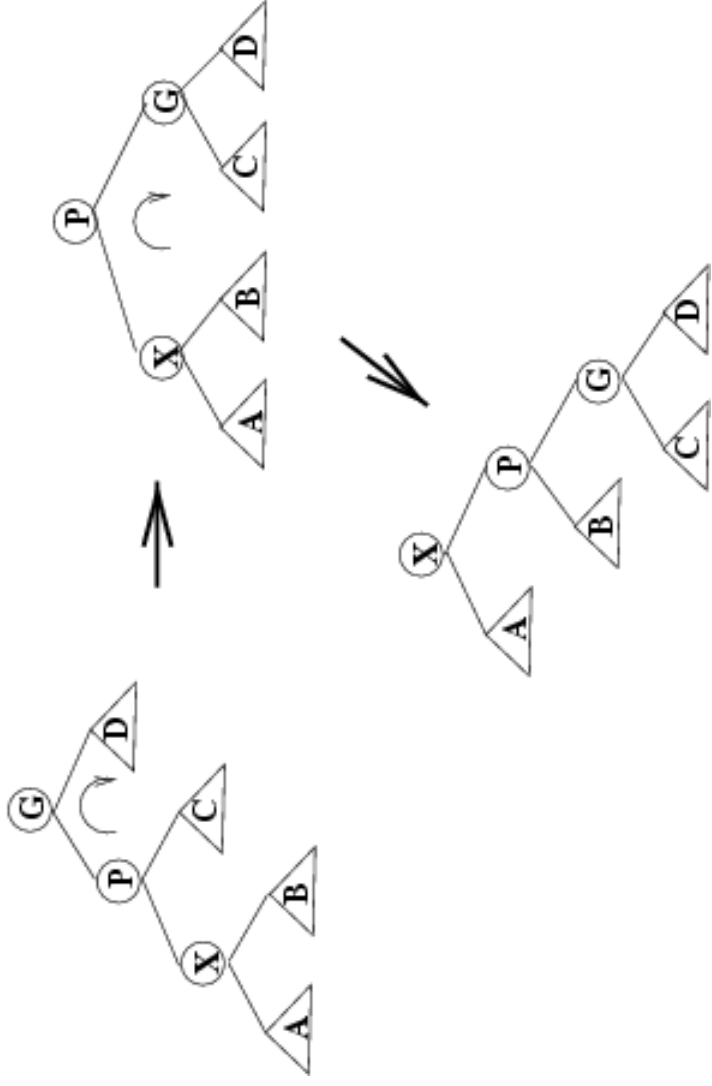
These diagrams show the rotations necessary for “Bottom-Up” splaying.

Note that these diagrams illustrate the rotations necessary whenever the node to be splayed is a left child. Symmetric rotations are performed when the node is a right child.

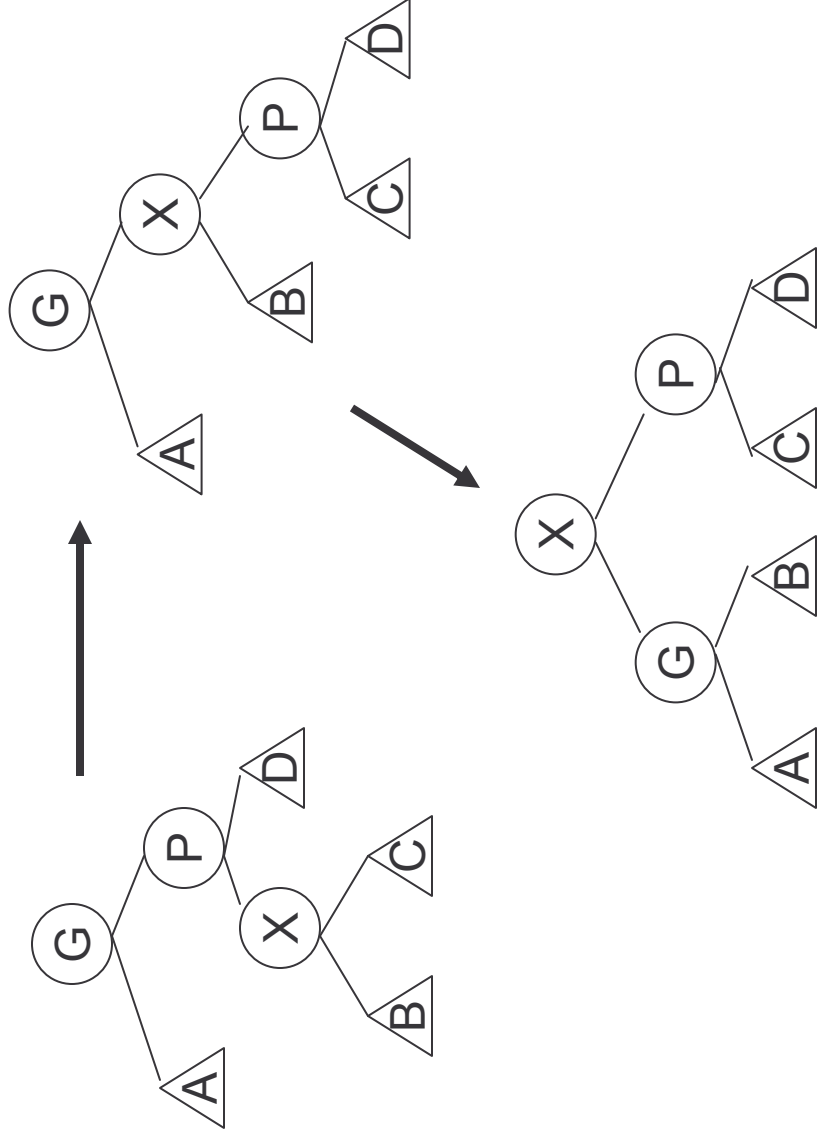
Bottom-Up Single Rotation



Bottom-Up Zig-Zig



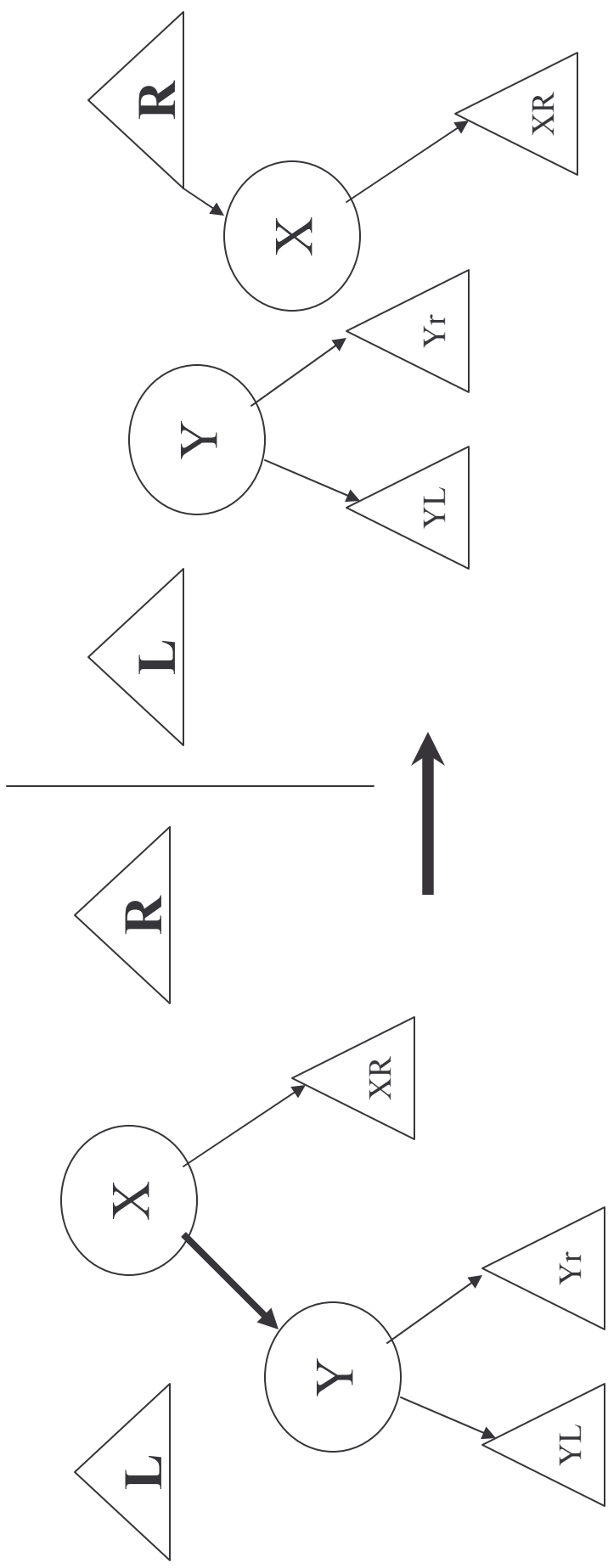
Bottom-Up Zig-Zag



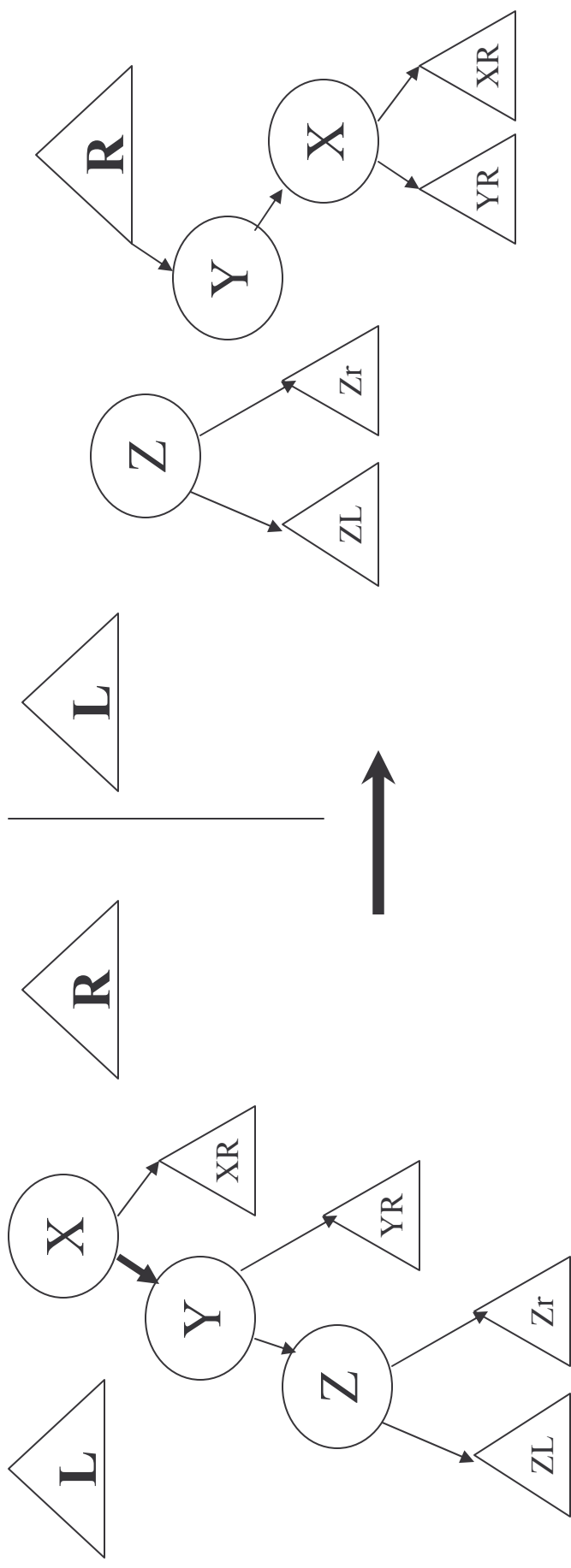
Top-Down Splaying

These diagrams illustrate the reorganization of the splay tree as we follow the left-link from a node. Note that symmetric reorganization of the tree occurs when the right-link is followed.

Top-Down Zig



Top-Down Zig-Zig



Top-Down Zig-Zag

