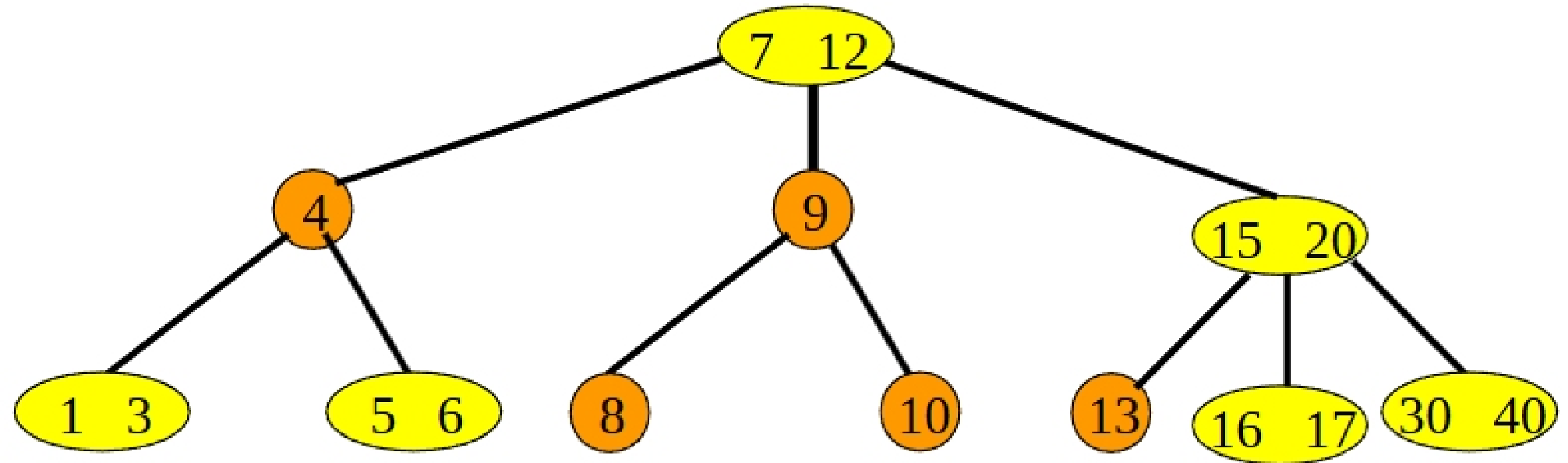


B-Trees (continued)

- Analysis of worst-case and average number of disk accesses for an insert.
- Delete and analysis.
- Structure for B-tree node

Worst-Case Disk Accesses



Insert 14.

Insert 2.

Insert 18.

Worst-Case Disk Accesses

- Assume enough memory to hold all h nodes accessed on way down.
- h read accesses on way down.
- $2s+1$ write accesses on way up, s = number of nodes that split.
- Total $h+2s+1$ disk accesses.
- Max is $3h+1$.