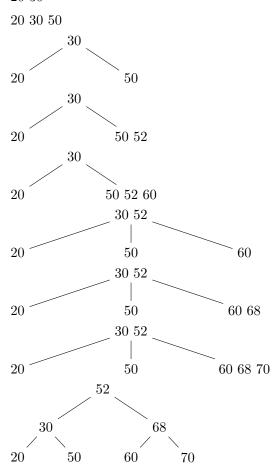
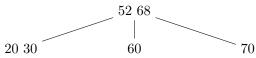
1 9.14



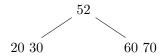
20 30



删除 50:



删除 68:



2 9.15

高度为 h 的三阶 B-树, 每一层最多节点:

高度为 h 的三阶 B-树, 每一层最少节点:

$$\begin{split} k &= 1 - - - - - - - - - \lceil \frac{3}{2} \rceil^0 \\ k &= 2 - - - - - - - - - \lceil \frac{3}{2} \rceil^1 \\ k &= 3 - - - - - - - - - \lceil \frac{3}{2} \rceil^2 \\ k &= 4 - - - - - - - - \lceil \frac{3}{2} \rceil^3 \\ &\vdots \\ k &= h - - - - - - - - - - \lceil \frac{3}{2} \rceil^{h-1} \end{split}$$

则叶子节点数目: $[2^{h-1}, 3^{h-1}]$