CS180 - AVL trees (2)

Announcements

- HW now due Mon
- Test next Friday (review next Thurs)
- Lab tomorrow
- Boeing scholarships - due Fri.
AVL trees

Main property:
- height of children are within one of each other.

\[ \leq 2 \cdot \log_2 n \]
Insert:
Consider x, y, z. How can we restructure?
(Hint: What is in-order traversal of these in each case?)

[Diagrams showing different tree structures]
Note: Only have to rotate once!

Why?

\[ \begin{array}{c}
\text{height } h \\
\text{h-1} \\
\text{h-3}
\end{array} \]
So how can we code this?

Back to Binary Tree.h:

- pivot (it) will swap it
  and its parent

Diagram: