Good Will Hunting Problem

(Solution)
Video Clip

• https://www.youtube.com/watch?v=N7b0cLn-wHU
“Draw all the homeomorphically irreducible trees with $n=10$.\"
The rules

- In this case “trees” simply means graphs with **no cycles**
  - Does not imply clear hierarchy of parents/children
- “with n = 10” (i.e., has **10 nodes**)
- **No nodes of degree 2**
  - For this problem, nodes of degree 2 are useless in terms of tree structure—they just act as a blip on an edge—and are therefore banned
- Have to be actually different
  - Ignore superficial changes in rotation or angles of drawing
Solution explanations

• A nice explanation here:
  https://www.youtube.com/watch?v=811LbompjPg

• A nice writeup here (also includes the problem Will solved before he solved this tree one):