

Class 30: Models of Computation



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Menu

- Are complexity classes really meaningful?
- How can we model computation?
- Turing Machines
- Universal Turing Machine

Complexity Classes

- We claimed problem complexity doesn't depend on the language or computer: *problems* are in class P and NP regardless of what kind of computer you have
- In PS7, we saw that if you have a quantum computer you solve a problem that has no known polynomial time solution on a “normal computer” in polynomial time.
- This should bother you!