

## **Turning Machines**

- A turing machine is a finite automata with an infinite tape that is used as memory
- it differs from other finite automata because it is read and write as opposed to read only
- turning machine tape is infinite
- final state are immediately final

## **Algorithms and the Church-Turing Thesis**

### **Decidability**

### **Undecidability & Reducibility (Reduction)**

### **Reducibility (Reduction) cont.**

### **Complexity P and NP**

### **NP Reduction and NP-Completeness**

### **The Cook-Levin Theorem**

### **Additional NP-Complete Problems Course Wrap Up**

### **Final Exam Review**