


Ch 13 

Performance

$$\frac{\text{Time}}{\text{Program}} = \frac{\text{Instructions}}{\text{Program}} \cdot \frac{\text{Cycles}}{\text{Instruction}} \cdot \frac{\text{Time}}{\text{Cycle}}$$

$$\text{Performance} = \frac{1}{\text{Time}}$$

To reduce execution time:

- ↓ executed instructions
- ↓ cycles per instruction (CPI)
- ↓ cycle time