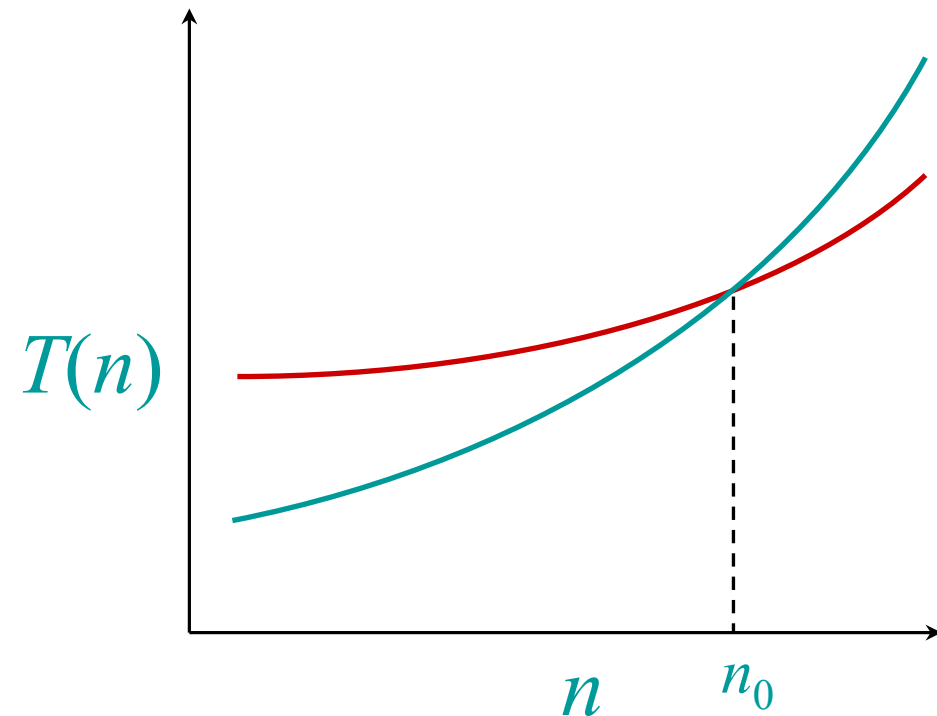




# Asymptotic performance

When  $n$  gets large enough, a  $\Theta(n^2)$  algorithm *always* beats a  $\Theta(n^3)$  algorithm.



- We shouldn't ignore asymptotically slower algorithms, however.
- Real-world design situations often call for a careful balancing of engineering objectives.
- Asymptotic analysis is a useful tool to help to structure our thinking.