

# Deadlock Avoidance

## The Banker's Algorithm for a Single Resource

The **banker's algorithm** considers each request as it occurs, and sees if granting it leads to a safe state.

	Has	Max
A	0	6
B	0	5
C	0	4
D	0	7

Free: 10

(a)

	Has	Max
A	1	6
B	1	5
C	2	4
D	4	7

Free: 2

(b)

	Has	Max
A	1	6
B	2	5
C	2	4
D	4	7

Free: 1

(c)

*unsafe  $\neq$  deadlock*