

Deadlock Avoidance

Safe and Unsafe States

Assuming $E = 10$

Unsafe

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 2 | 4 |
| C | 2 | 7 |

Free: 3
(a)

| Has Max | | |
|---------|---|---|
| A | 4 | 9 |
| B | 2 | 4 |
| C | 2 | 7 |

Free: 2
(b)

| Has Max | | |
|---------|---|---|
| A | 4 | 9 |
| B | 4 | 4 |
| C | 2 | 7 |

Free: 0
(c)

| Has Max | | |
|---------|---|---|
| A | 4 | 9 |
| B | — | — |
| C | 2 | 7 |

Free: 4
(d)

Safe

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 2 | 4 |
| C | 2 | 7 |

Free: 3
(a)

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 4 | 4 |
| C | 2 | 7 |

Free: 1
(b)

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 0 | — |
| C | 2 | 7 |

Free: 5
(c)

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 0 | — |
| C | 7 | 7 |

Free: 0
(d)

| Has Max | | |
|---------|---|---|
| A | 3 | 9 |
| B | 0 | — |
| C | 0 | — |

Free: 7
(e)