

Logical (or Lamport) Ordering(2)

- Define a logical relation *Happens-Before* among pairs of events
- *Happens-Before* denoted as \rightarrow
- Three rules
 1. On the same process: $a \rightarrow b$, if $time(a) < time(b)$ (using the local clock)
 2. If p1 sends m to p2: $send(m) \rightarrow receive(m)$
 3. (Transitivity) If $a \rightarrow b$ and $b \rightarrow c$ then $a \rightarrow c$
- Creates a *partial order* among events
 - Not all events related to each other via \rightarrow