

- Processor 1 loads  $x$  into its register 5
- Processor 1 increments its register 5
- Processor 2 loads  $x$  into its register 5
- Processor 1 stores its register 5 into  $x$
- Processor 2 increments its register 5
- Processor 2 stores its register 5 into  $x$

**Figure 18.8** A sequence of steps that can occur when two independent processors or cores access variable  $x$  in shared memory.