1. Receive a packet (i.e., transfer the packet into memory).
2. Verify packet integrity (i.e., verify that no changes occurred between transmission and reception).
3. Check for routing loops (i.e., decrement a value in the header, and reform the header with the new value).
4. Route the packet (i.e., use the destination address field to select one of the possible output networks and a destination on that network).
5. Prepare for transmission (i.e., compute information that will be used to verify packet integrity).
6. Transmit the packet (i.e., transfer the packet to the output device).

**Figure 18.3** An example series of steps that hardware in an Internet router performs to forward a packet.