```
27    public void enq(T x) {
28      boolean mustWakeDequeuers = false;
29      Node e = new Node(x);
30      enqLock.lock();
31      try {
32        while (size.get() == capacity)
33          notFullCondition.await();
34        tail.next = e;
35        tail = e;
36        if (size.getAndIncrement() == 0)
37          mustWakeDequeuers = true;
38      } finally {
39        enqLock.unlock();
40      }
41      if (mustWakeDequeuers) {
42        deqLock.lock();
43        try {
44          notEmptyCondition.signalAll();
45        } finally {
46          deqLock.unlock();
47        }
48      }
49    }
```

FIGURE 10.4 The BoundedQueue class: the enq() method.