The initial call is made, and method fact begins execution:

At point A a recursive call is made, and the new invocation of the method fact begins execution:

At point A a recursive call is made, and the new invocation of the method fact begins execution:

At point A a recursive call is made, and the new invocation of the method fact begins execution:

This is the base case, so this invocation of fact completes:

The method value is returned to the calling box, which continues execution:

The current invocation of fact completes:

The method value is returned to the calling box, which continues execution:

The current invocation of fact completes:

The method value is returned to the calling box, which continues execution:

The current invocation of fact completes:

The value 6 is returned to the initial call.

FIGURE 2.5
(continued from previous)
The initial call is made, and the function begins execution:

Output line: t
Point A (writeBackward(s, size-1)) is reached, and the recursive call is made.
The new invocation begins execution:

Output line: ta
Point A is reached, and the recursive call is made.
The new invocation begins execution:

Output line: tax
Point A is reached, and the recursive call is made.
The new invocation begins execution:

This is the base case, so this invocation completes.
Control returns to the calling box, which continues execution:

This invocation completes. Control returns to the calling box, which continues execution:

This invocation completes. Control returns to the statement following the initial call.

**FIGURE 2-7**

Box trace of `writeBackward("cat", 3)`