

# Answers to End of Section and Review Exercises for Chapter 9

## Exercises 9.1

1. The precondition of each index-based operation is that the index argument must be greater than or equal to 0 and less than the length of the list.
2. The index-based `insert` operation places the new item before the item at the index position if the index argument is less than the length of the list. If the index argument is greater than or equal to the length of the list, the new item is placed after the last item. The position-based `insert` operation places the new item before the item returned by the most recent `next` or `previous` operation if the cursor is defined. If the cursor is not defined, `insert` places the new item at the end of the list.

## Exercises 9.2

1. Either list implementation would work well for a stack or a bag, whereas the linked implementation is preferable for a queue.
2. These are not bad ideas. Both subclasses would be true extensions, in that they simply add methods to or redefine methods already available in the superclasses. There are no obvious disadvantages.

## Answers to Review Questions

1. c and e
2. b
3. c
4. b
5. b
6. a
7. b
8. b
9. b
10. a