Recommended Practice Programming Problems from Gaddis

Basic C++:

• Chapter 2, Introduction to C++, Programming Challenges:
  1 Sum of Two Numbers
  2 Sales Prediction
  3 Sales Tax
  4 Restaurant Bill
  5 Average of Values

• Chapter 3, Expressions and I/O, Programming Challenges:
  1 Miles per Gallon
  2 Stadium Seating
  3 Test Average
  4 Average Rainfall
  5 Male and Female Percentages
  6 Ingredient Adjuster
  7 Box Office
  12 Celsius to Fahrenheit.

• Chapter 4, Making Decisions, Programming Challenges:
  1 Minimum/Maximum
  2 Roman Numeral Converter
  3 Magic Dates
  4 Areas of Rectangles
  5 Body Mass Index
  12 Software Sales, Format the output to two decimal points of precision.

• Chapter 5, Loops and Files, Programming Challenges:
  1 Sum of Numbers
  3 Ocean Levels
  4 Calories Burned
  5 Membership Fees Increase
  6 Distance Traveled
  12 Celsius to Fahrenheit Table
  13 The Greatest and Least of These
  16 Savings Account Balance
Functions, Arrays & Structs:
• Chapter 6, Functions, Programming Challenges:
  1 Markup
  3 Winning Division
  5 Falling Distance
  7 Celsius Temperature Table
  11 Lowest Score Drop
• Chapter 7, Arrays, Programming Challenges:
  1 Largest/Smallest Array Values
  2 Rainfall Statistics
  3 Chips and Salsa
  4 Larger Than n
  10 Drivers License Exam
• Chapter 11, Structs, Programming Challenges:
  1 Movie Data
  2 Movie Profit
  3 Corporate Sales Data
  4 Weather Statistics
  6 Soccer Scores

Searching & Sorting:
• Chapter 8, Searching and Sorting Arrays, Programming Challenges:
  2 Lottery Winners
  3 Lottery Winners Modification
  8 Search Benchmarks
  9 Sorting Benchmarks
  10 Sorting Orders

Pointers:
• Chapter 9, Pointers, Programming Challenges:
  1 Array Allocator
  2 Test Scores #1
  3 Drop Lowest Score.
  5 Pointer Rewrite
  8 Mode Function
  10 Reverse Array
  11 Array Expander
Classes:
• Chapter 13, Introduction to Classes, Programming challenges:
  1 Date
  2 Employee Class
  3 Car Class
  4 Personal Information Class
  7 TestScores Class
  8 Circle Class
  10 Number Array Class
    add a copy constructor that allocates a NEW array and copies the values from the copy constructor's argument.
  11 Payroll

Linked Lists:
• Chapter 18, Linked Lists, Programming Challenges:
  1 Your own linked list (or use NumberList for this)
  2 List Print (or use NumberList)
  3 List Copy Constructor
  5 List Search
  6 Member Insertion by Position
  7 Member Removal by Position
  15 pop and push member functions

Stacks & Queues:
• Chapter 19, Stacks and Queues, Programming Challenges:
  6 Dynamic String Stack
  9 File Reverser
  12 Inventory Bin Stack
  14 Balanced Parentheses ()