Two files should be submitted on the blackboard, .pdf, .cs.

1. Submit your answers in hw1.pdf for the following exercise problems from the textl
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3.1, 3.10, 3.13, 3.23

### 2. Submit your source code programs in \*.cs files for the following exercise problems from the textbook.

3\_14.cs file for problem 3.14. (Displaying Numbers) Write an app that displays the numbers...

3 24.cs file for problem 3.24. (Displaying Numbers) Write an app that reads an integer...

3\_28.cs file for problem 3.28. (Digits of an Integer) Write an app that inputs one number...

#### **Total Points (100 points)**

### 3.1 Fill in the blanks in each of the following statements (20 points):

a) A(n)	{	_begins the body of every method, and a(n)	}	ends the body of every
method.				

- b) Most statements end with a(n) ; . .
- c) The <u>if()</u> statement is used to make decisions.
- d) \_\_\_\_\_begins a single-line comment.
- g) C# apps begin execution at method <u>Main</u>.
- h) Methods Ole. Write Console Write ine and Console window.
- i) \_\_\_\_\_ enables you to insert values directly into a string literal.

## 3.10 Assuming that x = 2 and y = 3, what does each of the following statements display? (10 points)

- a) Console.WriteLine( $\$"x = \{x\}"$ ); x = 2
- b) Console.WriteLine(\$"Value of  $\{x\} + \{x\}$  is  $\{x + x\}$ "); Value of 2 + 2 is 4
- c) Console.Write("x ="); X =
- d) Console.WriteLine( $\{x + y\} = \{y + x\}^n$ ); 5 = 5

# 3.13 (Order of Evaluation) State the order of evaluation of the operators in each of the following (15 points)

C# statements and show the value of x after each statement is performed:

a) 
$$x = 7 + 3 * 6 / 2 - 1;$$
 \*, /, +, -  $x = 15$   
b)  $x = 2 % 2 + 2 * 2 - 2 / 2;$  \*, /, +, \*  $x = 324$ 

- 3.14 (Displaying Numbers) Write an app that displays the numbers 1 to 4 on the same line, with each pair of adjacent numbers separated by one space. Write the app using the following techniques: (15 points)
- a) Use one Console.WriteLine statement.
- b) Use four Console. Write statements.
- c) Use one Console. WriteLine statement with four int variables and string interpolation.
- 3.23 What does the following code display? (5 points)

Console.WriteLine(\$"{s1}\n{s2}\n{s3}");

- **3.24 (Odd or Even) Write an app that reads an integer, then determines and displays whether it's odd or even. (15 points)** [**Hint:** Use the remainder operator. An even number is a multiple of 2. Any multiple of 2 leaves a remainder of 0 when divided by 2.]
- **3.28 (Digits of an Integer) (20 points)** Write an app that inputs one number consisting of five digits from the user, separates the number into its individual digits and displays the digits separated from one another by three spaces each. For example, if the user types 42339, the app should display

#### 42339

Assume that the user enters the correct number of digits. What happens when you execute the app and type a number with more than five digits? What happens when you execute the app and type a number with fewer than five digits? [Hint: It's possible to do this exercise with the techniques you learned in this chapter. You'll need to use both division and remainder operations to "pick off" each digit.]