

Names:

Vocabulary Focus: Defining and Calling Methods

Study the two class samples and answer the following questions on the methods within each class.

1. Which method in these classes is not defined as public?

computeAreaRectangle ()

2. Is there a non-static method in either of these two classes? How do you know this method is not

static?

computeAreaRectangle v2 ()

3. Which methods in these classes take exactly one parameter? For each method you list, write down the line numbers in the code that indicate that when the method is called, it will need an argument.

computeAreaSquare () # 7, 18

computePerimeterSquare () # 8, 23

main () # 4

4. Which methods in these classes take exactly two parameters? For each method you list, write down the line numbers in the code that indicate that when the method is called, it will need an argument.

computeAreaTriangle () 9, 28

computeAreaRectangle () 10, 33

computeAreaRectangle v2 () 11, 38

5. List the methods in these classes that are 'void' methods? How do we know they are void? What do you think it means for a method to be void?

all methods from Demo 1

no return value or output! → VOID
data

6. List the methods in these classes that will return data? How do we identify a method that has a return value? There are two answers to this question.

all methods from Demo 2 But main ()
→ the method header & the return statement

7. List the method in these classes that returns double data. Is there a logic error in this method that might produce an undesirable output? How would we fix this logic error?

#28, divide by 2.0

8. Describe what's wrong with the method call below? Will this generate a runtime error or a compiler error?

misspelled
computerAreaSquare(4.5);
takes int data

9. There is a variable in one of these methods that is only accessible to that method because it is declared within it? What is the identifier of this variable and which method is it in?

#40, 'result' in computeAreaRectangleV2

10. List several examples of identifiers of 'parameter variables' in these programs.

length, width, height