**CS 1301**

**Exam 1, Spring 2020**

**(40pts)**

**Name:**

1. **What will be the result of the following assignment statement? Assume b = 5 and c = 10.**

**int a = b \* (-c + 2) / 2;**

a. 30

b. -30

c. 20

d. -20

e. -6

**2. Assume that x, y, and z are all integers (int) equal to 50, 20, and 6 respectively. What is the result of x / y / z?**

a. 0

b. 12

c. 16

d. A syntax error as this is syntactically invalid

e. A run-time error because this is a division by 0

**3. What is output with the statement System.out.println(x+y); if x and y are int values where x = 10 and y = 5?**

a. 15

b. 105

c. 10 5

d. x+y

**4. Suppose a Scanner object is created as follows: Scanner input = new Scanner(System.in); What method do you use to read an int value?**

a. input.nextInt();

b. input.nextInteger();

c. input.int();

d. input.integer();

**5. \_\_\_\_\_\_\_\_ is the Java assignment operator.**

a. ==

b. :=

c. =

d. =:

**6. 25 % 1 is \_\_\_\_\_\_\_\_.**

a. 1

b. 2

c. 3

d. 4

e. 0

**7. What is x after the following statements? int x = 1; int y = 2; x \*= y + 1;**

a. x is 1.

b. x is 2.

c. x is 3.

d. x is 4.

**8. Of the following types, which one cannot store a numeric value?**

a. int

b. byte

c. float

d. all of these can store numeric values

**9. The word void in Java is a**

a. method

b. variable

c. class

d. reserved word

**10. Every Java application program must have the following to run**

a. a class named main

b. a method named main

c. comments

d. integer variables

**11. What is the result of the following statement? 25/4 + 4 \* 10 % 3**

a. 19

b. 5.25

c. 3

d. 7

**12. Which of the following is *not* a rule that must be followed when naming identifiers?**

a. The first character must be one of the letters a-z, A-Z, and underscore or a dollar sign.

b. Identifiers can contain spaces.

c. Uppercase and lowercase characters are distinct.

d. After the first character, you may use the letters a-z, A-Z, the underscore, a dollar sign, or digits 0-9.

**13. The expression (int)(76.0252175 \* 100) / 100 evaluates to \_\_\_\_\_\_\_\_.**

a. 76.02

b. 76

c. 76.0252175

d. 76.03

**14. Which of the following is a legal Java identifier?**

a. i

b. class

c. ilikeclass!

d. idon'tlikeclass

e. i-like-class

**15.What is the printout of the following code: double x = 5.5; int y = (int)x; System.out.println("x is " + x + " and y is " + y);**

a. x is 5 and y is 6

b. x is 6.0 and y is 6.0

c. x is 6 and y is 6

d. x is 5.5 and y is 5

e. x is 5.5 and y is 5.0

**16. The extension name of a Java source code file is**

a. .java

b. .obj

c. .class

d. .exe

**17. The boolean data type may contain values in the following range of values**

a. true or false

b. -128 to +127

c. -2,147,483,648 to +2,147,483,647

d. -32,768 to +32,767

**18.In order to create a constant, you would use which of the following Java reserved words?**

a. private

b. static

c. int

d. final

e. class

1. **Write a program that reads in the length and the breadth of a rectangle and computes perimeter using the following formula: (6pts)**

perimeter = 2\*(length + breadth)

import java.util.Scanner; (1 point)

public class P1 {

public static void main(String[] args) {

Scanner input = new Scanner(System.in); (1 point)

double length, breadth, perimeter; (1 point)

System.out.println("Enter Length: ");

length = input.nextDouble(); (1 point)

System.out.println("Enter Breadth: ");

breadth = input.nextDouble(); (1 point)

perimeter = 2\*(length + breadth); (1 point)

System.out.println("Perimeter is: "+perimeter);

}

}

1. **Write a program that calculates hours, minutes, and seconds from input seconds. So for example, if the user inputs 7805 seconds, the output will be 2 hours 10 minutes 5 seconds (7pts)**

import java.util.Scanner; (1 point)

public class P2

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in); (1 point)

System.out.println("Enter Seconds: ");

int seconds = input.nextInt(); (1 point)

int currentSeconds = seconds % 60; (1 point)

int minutes = seconds / 60; (1 point)

int currentMinutes = minutes % 60; (1 point)

int hours = minutes / 60; (1 point)

System.out.println(hours + ":" + currentMinutes + ":" + currentSeconds);

}

}