Quizlet

Testbank 2

109 terms | Anyssa_I

Which of the following options declares a float variable? a) Float age; b) flt age; c) float age; d) age: float;	c) float age; ☆

What is the result of the following code snippet?
 	
public static void main(String[] args
{
double circleRadius;
double circleVolume = 22 / 7 * circleRadius * circleRadius;
System.out.println(circleVolume);
}
 	
a) 0
b) 3.14
c) 6.28
d) compile-time error
	d) compile-time error ☆

What is wrong with the following code snippet? public class Area { public static void	b) The code snippet uses an undeclared variable. ☆

```
main(String[] args)
{
int width = 10;
height = 20.00;
System.out.println("area = " +
(width * height));
}
}
```

a) The code snippet uses an uninitialized variable.
b) The code snippet uses an undeclared variable.
c) The code snippet attempts to assign a decimal value to an integer variable.
d) The code snippet attempts to add a number to a string variable.

What is wrong with the following code snippet?

```
int average;
average = 78A;
```

a) The average variable is never initialized.
b) The data type for the average variable is not specified.
c) The average variable is never assigned a value.
d) The average variable is assigned a non-numeric value.

d) The average variable is assigned a non-numeric value. ☆

Which of the following guidelines will make code more explanatory for others? a) Use more statements in source code. b) Add comments to source code. c) Avoid usage of complex calculations in source code. d) Always enclose the statements in curly braces in source code.	b) Add comments to source code. ☆

What will be the value stored in the variable x after the execution of the following code snippet?
 	
int a = 10;
int b = 20;
int c = 2;
int x = b / a /*c*/;
 	
a) 1
b) 2
c) 4
d) The code has a syntax error
	b) 2 ☆

Which of the following statements with comments is(are) valid? I. int cnt = 0; /* Set count to 0 II. int cnt = 0; /* Set count to	c) II and III are valid ☆

0 */ III. int cnt = 0; // Set count to 0 a) Only I is valid b) I and II are valid c) II and III are valid d) Only III is valid	
What is wrong with the following code? int count = 2000 * 3000 * 4000; a) Wrong data type b) Variable is undefined c) Integer overflow d) Illegal expression	c) Integer overflow ☆

Which one of the following variables is assigned with valid literals?
 	
a) int salary = 0;
salary = 5000.50;
b) int salary1 = 0;
salary1 = 1.2E6;
c) double salary2 = 0;
salary2 = 2.96E-2;
d) long salary3 = 0;
salary3 = 1E-6;
	c) double salary2 = 0;
	salary2 = 2.96E-2; ☆

What will be the value inside the variables a and b after the given set of assignments? int a = 20;	c) a = 16, b = 15 ☆

int b = 10;
a = (a + b) / 2;
b = a;
a++;

a) a = 15, b = 16
b) a = 16, b = 16
c) a = 16, b = 15
d) a = 15, b = 15

What is the value inside the value variable at the end of the given code snippet?

public static void
main(String[] args)
{
int value = 3;
value = value - 2 * value;
value++;
}

a) -2
b) 0
c) 2
d) 4

a) -2 ☆

What are the values of num1 and num2 after this snippet executes?

double num1 = 4.20;
double num2 = num1 * 10 + 5.0;

a) num1 = 4.20 and num2 = 42.0

b) num1 = 4.20 and num2 = 47.0 ☆

b) num1 = 4.20 and num2 = 47.0
c) num1 = 42.0 and num2 = 42.0
d) num1 = 42.0 and num2 = 47.0

What is the result of the following expression?

double d = 2.5 + 4 * -1.5 - (2.5 + 4) * -1.5;

a) 24.375
b) 6.25
c) 12.375
d) 6

b) 6.25 ☆

What is the output of the following code snippet?

```
public static void
main(String[] args)
{
int value = 3;
value++;
System.out.println(value);
}
```

a) 2
b) 3
c) 4
d) No output due to syntax error

c) 4 ☆

What is the output of the following code snippet?

c) 49 ☆

```
public static void
main(String[] args)
{
int value = 25;
value = value * 2;
value--;
System.out.println(value);
}
```

a) 25
b) 50
c) 49
d) 26

Assuming that the user inputs a value of 25 for the price and 10 for the discount rate in the following code snippet, what is the output?

```
public static void
main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter the
price: ");
double price =
in.nextDouble();
System.out.print("Enter the
discount rate: ");
double discount =
in.nextDouble();
System.out.println("The new
price is " +
price - price * (discount /
```

c) The new price is 22.5 ☆

100.0)); } a) The new price is 25 b) The new price is 15 c) The new price is 22.5 d) The new price is 20.0	
Which of the following statements is correct about constants? a) Constants are written using capital letters because the compiler ignores constants declared in small letters. b) The data stored inside a constant can be changed using an assignment statement. c) You can make a variable constant by using the final reserved word when declaring it. d) Constant variables can only be changed through the Math library.	c) You can make a variable constant by using the final reserved word when declaring it. ☆
Which one of the following operators computes the remainder of an integer division? a) / b) % c) \ d) !	b) % ☆

What is the value of Math.pow(3, 2)? a) 6 b) 9 c) 8 d) 5	b) 9 ☆

What is the output of the following code snippet?
 	
public static void main(String[] args)
{
double a;
a = Math.sqrt(9.0) + Math.sqrt(16.0);
System.out.println(a);
}
 	
a) 25.0
b) 337.0
c) 7.0
d) 19.0
	c) 7.0 ☆

Which is the Java equivalent of the following mathematical expression?
 	
c = √(a2 + b2)
 	
a) c = Math.sqrt(a * 2 + b * 2);
b) c = Math.sqrt(a * 2) + Math.sqrt(b * 2);
c) c = Math.sqrt(Math.pow(a, 2) + Math.pow(b, 2));
	c) c = Math.sqrt(Math.pow(a, 2) + Math.pow(b, 2)); ☆

d) c = Math.sqrt(Math.pow(a, 2)) + Math.sqrt(Math.pow(b, 2));	
Which one of the following is a correct representation of the given mathematical expression in Java? a + b ----- 2 a) a + b % 2 b) a + b / 2 c) a + (b / 2) d) (a + b) / 2	d) (a+b) / 2 ☆

Which of the following is the Java equivalent of the following mathematical expression?
 	
c = 2 radius
 	
a) c = 2 * Math.PI * radius * 2;
b) c = 2 * Math.PI * Math.pow(2, radius);
c) c = 2 * Math.PI * Math.pow(radius, 2);
d) c = 2 * Math.PI * radius;
	d) c = 2 * Math.PI * radius; ☆

What is the result of the following statement? String s = "You" + "had" + "me" + "at" + "hello";	d) The string s has the following value: "Youhadmeathello" ☆

a) The string s has the following value: "You had me at "hello" b) The statement results in an error because the + operator can be used only with numbers c) The statement results in an error because the + operation cannot be performed on string literals d) The string s has the following value: "Youhadmeathello"	
Which operator is used to concatenate two or more strings? a) + b) % c) & d) ^	a) + ☆
What output is produced by these statements? String name = "Joanne Hunt"; System.out.println(name.length()); a) 8 b) 10 c) 9 d) 11	d) 11 ☆
What is the output of the following code snippet?	d) VE MY ☆

public static void
main(String[] args){
{
String str1;
str1 = "I LOVE MY COUNTRY";
String str2 = str1.substring(4,
9);
System.out.println(str2);
}

a) I LOV
b) OVE M
c) V
d) VE MY

What is the output of the following code snippet?

public static void
main(String[] args)
{
int s;
double f = 365.25;
s = f / 10;
System.out.println(s);
}

a) 36
b) 36.525
c) 37
d) No output because the code snippet generates compilation errors

a) 36 ☆

How do you compute the length of the string str?

d) str.length() ☆

a) length(str)
b) length.str
c) str.length
d) str.length()

Assuming that the user inputs "Joe" at the prompt, what is the output of the following code snippet?

```
public static void
main(String[] args)
{
System.out.print("Enter your
name ");
String name;
Scanner in = new
Scanner(System.in);
name = in.next();
name += ", Good morning";
System.out.print(name);
}
```

a) The code snippet does not compile because the += operator cannot be used in this context.
b) Joe, Good morning
c) , Good morning
d) Joe

b) Joe, Good morning ☆

Which one of the following refers to a number constant that appears in code without explanation?

c) Magic number ☆

a) Constant
b) Variable
c) Magic number
d) String literal

What happens to the fractional part when a division is performed on two integer variables?

a) The fractional part is rounded off to the nearest integer value.
b) The fractional part is discarded.
c) Two integers cannot be used in division; at least one of the operands should be a floating-point number.
d) Instead of using an integer division, you should use the modulus operator to perform floating-point division.

b) The fractional part is discarded. ☆

Consider the following division statements:

I. 22 / 7
II. 22.0 / 7
III. 22 / 7.0

Which of the following is correct?

a) All three statements will return an integer value.
b) Only I will return an integer

b) Only I will return an integer value. ☆

value.
c) Only I, II will return an integer value.
d) Only I and III will return an integer value.

Which of the following options is valid with reference to the code snippet?

```
public static void
main(String[] args)
{
double d = 45.326;
double r = d % 9.0;
System.out.println(r);
}
```

a) The value inside the variable r will be 0.326
b) The value inside the variable r will be 5.036
c) Variable r has to be defined as an integer because the % operator always returns an integer
d) The initialization of variable r is wrong, because the % operator expects integer values as operands

a) The value inside the variable r will be 0.326 ☆

What is the output of the following code snippet?

```
public static void
main(String[] args)
{
```

d) There will be no output due to a run-time error. ☆

int var1 = 10;
int var2 = 2;
int var3 = 20;
var3 = var3 / (var1 % var2);
System.out.println(var3);
}
 	
a) 0
b) 4
c) 20
d) There will be no output due to a run-time error.	

Which one of the following statements gives the absolute value of the floating-point number x = -25.50?
 	
a) abs(x);
b) Math.abs(x);
c) x.abs();
d) x.absolute();
	b) Math.abs(x); ☆

Assuming that the user enters 45 and 62 as inputs for n1 and n2, respectively, what is the output of the following code snippet? public static void main(String[] args) { System.out.print("Enter a number: "); Scanner in = new Scanner(System.in); String n1 = in.next();	d) 4562 ☆

System.out.print("Enter another number: "); String n2 = in.next(); String result = n1 + n2; System.out.print(result); } a) 46 b) 4662 c) 107 d) 4562	
Which of the methods below are static methods? I. length II. Substring III. Pow IV. sqrt a) All the methods are static b) Only I, II and III c) Only II and IV d) Only III and IV	d) Only III and IV ☆
Which one of the following statements can be used to extract the last five characters from any string variable str? a) str.substring(str.length() - 5, str.length()) b) str.substring(5, 5) c) str.substring(str.length() - 4, 5) d) str.substring(str.length() - 5, 5)	a) str.substring(str.length() - 5, str.length()) ☆

Assuming that the user inputs a value of 25000 for the pay and 10 for the bonus rate in the following code snippet, what is the output?

```
public static void
main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter the
pay: ");
double pay = in.nextDouble();
System.out.print("Enter the
bonus rate: ");
double bonus =
in.nextDouble();

System.out.println("The new
pay is " +
(pay + pay * (bonus /
100.0)));
}
```

a) The new pay is 25000
b) The new pay is 25100
c) The new pay is 27500
d) The new pay is 30000

c) The new pay is 27500 ☆

What is the value of Math.abs(-2)?

a) -2
b) 0

c) 2 ☆

c) 2
d) 4

What is the output of the following code snippet?

```
public static void
main(String[] args)
{
double x;
x = Math.pow(3.0, 2.0) +
Math.pow(4.0, 2.0);
System.out.println(x);
}
```

a) 25.0
b) 34
c) 7.0
d) 14

a) 25.0 ☆

Which is the Java equivalent of the following mathematical expression?
$c = (\sqrt{a} + \sqrt{b})2$

a) c = Math.sqrt(a * 2 + b * 2);
b) c = Math.sqrt(a * 2) + Math.sqrt(b * 2);
c) c = Math.sqrt(pow(a, 2) + Math.pow(b, 2));
d) c = Math.pow((Math.sqrt(a) + Math.sqrt(b)), 2);

d) c = Math.pow((Math.sqrt(a) + Math.sqrt(b)), 2); ☆

Which of the following is the Java equivalent of the following mathematical expression?

c) p = 2 * Math.PI * Math.pow(radius, 3); ☆

p = 2 (radius)3

a) p = 2 * Math.PI * (radius * 3);
b) p = Math.PI * Math.pow(3, radius);
c) p = 2 * Math.PI * Math.pow(radius, 3);
d) p = 2 * Math.pow(Math.PI * radius, 3);

How do you extract the first 5 characters from the string str?

a) substring(str, 5)
b) substring.str(0, 5)
c) str.substring(5)
d) str.substring(0, 5)

d) str.substring(0, 5) ☆

Which of the given System.out.print statements generates the following output?

ABCDE"\

a) System.out.println("ABCDE\"\\");
b) System.out.println("ABCDE"\");
c) System.out.println("ABCDE"\);
d)

a) System.out.println("ABCDE\"\\"); ☆

System.out.println("ABCDE\"\")	
Which of the given statements generates the following output? \\\"/// a) System.out.println("\\\"///"); b) System.out.println("\\\\\\\"//"); c) System.out.println("\\\\\\""////"); d) System.out.println("\\\"///");	b) System.out.println("\\\\\\\"///"); ☆

What will be the value inside the variables x and y after the given set of assignments?
 	
int x = 20;
int y = 10;
x = (x - y) * 2;
y = x / 2;
 	
a) x = 40, y = 20
b) x = 20, y = 10
c) x = 10, y = 20
d) x = 20, y = 20
	b) x = 20, y = 10 ☆

What is the value inside the var variable at the end of the given code snippet?	d) 31 ☆

public static void
main(String[] args)
{
int var = 30;
var = var + 2 / var;
var++;
}

a) 0
b) 1
c) 30
d) 31

What is the output of the following code snippet?

public static void
main(String[] args)
{
int num1 = 10;
int num2 = 5;
int num3 = 200;
num3 = num3 % (num1 *
num2);
System.out.println(num3);
}

a) 0
b) 4
c) 10
d) 250

a) 0 ☆

Assuming that the user enters 23 and 45 as inputs for num1 and num2, respectively, what is the output of the following code snippet?

d) 2345 ☆

```
public static void
main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter a
number: ");
String num1 = in.next();
System.out.print("Enter
another number: ");
String num2 = in.next();
System.out.println(num1 +
num2);
}
```

a) 23
b) 4523
c) 68
d) 2345

Which one of the following statements can be used to extract the last 10 characters from the string variable str?

a) str.substring(str.length() - 10, str.length())
b) str.substring(10, str.length())
c) str.substring(str.length() - 9, 10)
d) str.substring(0, 10)

a) str.substring(str.length() - 10, str.length()) ☆

Which one of the following statements can be used to convert a string str to a

c) double n = Double.parseDouble(str); ☆

double?
 	
a) double n = str.parseDouble();
b) double n = Integer.parseDouble(str);
c) double n = Double.parseDouble(str);
d) double n = double.parseDouble(str);	

Which one of the following statements can be used to get the fifth character from a string str?
 	
a) char c = str.charAt(5);
b) char c = str.charAt(4);
c) char c = str[5];
d) char c = str[4];
	b) char c = str.charAt(4); ☆

Which one of the following statements displays the output as 54321.00?
 	
a) System.out.printf("%8.2f", 54321.0);
b) System.out.printf("%8,2f", 54321.0);
c) System.out.printf(",8.2f", 54321.0);
d) System.out.printf("%8.00f", 54321.0);
	a) System.out.printf("%8.2f", 54321.0); ☆

Which one of the following statements displays the output as (1.23e+02)?	a) System.out.printf("%(5.2e", -123.0); ☆

a) System.out.printf("%(5.2e", -123.0);
b) System.out.printf("%5.2e", -123.0);
c) System.out.printf("^5.2e", -123.0);
d) System.out.printf("%5.2E", -123.0);	

Which one of the following statements defines a constant with the value 123?
 	
a) final int MY_CONST = 123;
b) const int MY_CONST = 123;
c) final int MY_CONST; MY_CONST = 123;
d) static int MY_CONST = 123;
	a) final int MY_CONST = 123; ☆

Which one of the following statements displays the output as +00321.00?
 	
a) System.out.printf("+%09.2f", 321.0);
b) System.out.printf("%009,2f", 321.0);
c) System.out.printf("+9.2f", 321.0);
d) System.out.printf("%09.00f", 321.0);
	a) System.out.printf("+%09.2f", 321.0); ☆

One way to avoid round-off	c) Math.round() ☆

errors is to use:

a) Math.sqrt()
b) Math.pow()
c) Math.round()
d) Math.truncate()

What (if any) type of error occurs with the following code if the user input is ABC?

```
public static void
main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter a
number: ");
String str = in.next();
int count =
Integer.parseInt(str);
System.out.println("Input is "
+ count);
}
```

a) Compile-time error
b) Run-time error
c) Overflow error
d) Illegal expression

b) Run-time error ☆

What does the following statement sequence print?

```
String str = "Harry";
int n = str.length();
String mystery =
str.substring(0, 1) +
```

d) Hry ☆

str.substring(n - 2, n);
System.out.println(mystery);

a) Ha
b) Har
c) Hy
d) Hry

What does the following statement sequence print?

String str = "Java Is Good";
int n = str.length();
String mystery =
str.substring(n - 4, n) +
str.charAt(4) +
str.substring(0, 4);
System.out.println(mystery);

a) Java
b) Good Java
c) Good
d) Is Good

b) Good Java ☆

What does the following statement sequence print?

final String str = "Java";
str += " is powerful";
System.out.println(str);

a) Java is powerful
b) Java + is powerful
c) is powerful
d) Nothing; compile-time error

d) Nothing; compile-time error ☆

What does the following

a) Java is powerful ☆

statement sequence print?

String str = "Java";
str += " is powerful";
System.out.println(str);

a) Java is powerful
b) Java + is powerful
c) is powerful
d) Compile-time error

What does the following statement sequence print if the user input is 123?

public static void
main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter a
number ");
int myInt = in.nextInt();
myInt += 456;
System.out.println(myInt);
}

a) 579
b) Compile-time error
c) Run-time error
d) 123456

a) 579 ☆

What does the following statement sequence print if the user input is 123?

public static void

d) 123456 ☆

main(String[] args)
{
Scanner in = new
Scanner(System.in);
System.out.print("Enter a
number: ");
String str = in.next();
str += 456;
System.out.println(str);
}

a) 579
b) Compile-time error
c) Run-time error
d) 123456

What is the output of the following statement sequence?

public static void
main(String[] args)
{
int x = 100.0 % 6.0;
System.out.println(x);
}

a) 4
b) Compile-time error
c) Run-time error
d) 16

b) Compile-time error ☆

Which statement is true?

a) Variables cannot be assigned and declared in the same statement

d) It is incorrect to initialize a string variable with a number ☆

b) Variable names must contain at least one dollar sign c) Variable names can be no more than 8 characters long d) It is incorrect to initialize a string variable with a number	
Which statement about number literals in Java is false? a) Numbers in exponential notation always have type double b) Zero is an integer c) Integers must be positive d) An integer with fractional part of .0 has type double.	c) Integers must be positive ☆
Which option represents the best choice for a variable name to represent the average grade of students on an exam? a) averageGrade b) $averageGrade c) avg d) AveGd	a) averageGrade ☆
The assignment operator a) denotes mathematical equality b) places a new value into a variable c) means the same as the	b) places a new value into a variable ☆

equals sign used in algebra d) makes it illegal to write a statement like sum = sum + 4;	
Which of the following statements about constants in Java are true? I. Although not required, constants are commonly named using uppercase letters II. Only integer values can appear as constants III. A variable can be defined with an initial value, but the reserved word final prevents it from being changed IV. A named constant makes computations that use it clearer a) I, II, III b) II, III, IV c) I, III, IV d) I, II, IV	c) I, III, IV ☆

What is the output of this code snippet?
 	
int sum = 22;
sum = sum + 2;
System.out.print(sum); //
sum = sum + 4;
System.out.print(sum);
	a) 2424 ☆

a) 2424
b) 2425
c) 2428
d) 2528

What is the output of this code snippet?

```
double average;
int grade1 = 87;
int grade2 = 94;
// System.out.print("The average is " + (grade1 + grade2) / 2.0);
System.out.print("The average is " + average);
```

a) Unpredictable result
b) The average is 91.5
c) The average is 91.5
The average is 91.5
d) The average is 91.5
The average is 0.0

a) Unpredictable result ☆

What is the output of the following code snippet?

```
int counter = 0;
counter++;
System.out.print("The initial value of the counter is ");
System.out.println(count);
```

a) The initial value of the counter is 0
b) The initial value of the counter is 1

c) The code will not compile ☆

c) The code will not compile d) The initial value of the counter is	
Which statements about numeric types in Java are true? I. There is more than one integer type II. The data type float uses twice the storage of double III. The numeric range of the Java integer type is related to powers of two a) I, II b) I, III c) II, III d) I, II, III	b) I, III ☆
The typical ranges for integers may seem strange but are derived from a) Base 10 floating-point precision b) Field requirements for typical usage and limits c) Overflows d) Powers of two because of base 2 representation within the computer	d) Powers of two because of base 2 representation within the computer ☆
What is result of evaluating the following expression? (45 / 6) % 5	a) 2 ☆

a) 2
b) 7
c) 2.5
d) 3

What is the difference between the result of the following two Java statements?

I. int cents = (int)(100 * price + 0.5);
II. int cents = (100 * price + 0.5);

a) Statement I causes truncation, but II does not
b) Statement II causes truncation, but I does not
c) Statement I compiles, but II does not
d) Statement II compiles, but I does not

c) Statement I compiles, but II does not ☆

The first step in problem solving is

a) To write the expression that calculates the answer
b) To understand the problem and its inputs and outputs
c) To do examples by hand that confirm the solution will work
d) To write Java code that can be executed and tested

b) To understand the problem and its inputs and outputs ☆

At what point in the problem-solving process should one write pseudocode?

a) After writing Java code, as a way to summarize the code's algorithm
b) Before writing Java code, as a guide for a general solution
c) After defining Java variables so that the pseudocode and data types make sense
d) Before working out examples by hand in order to guide those examples

b) Before writing Java code, as a guide for a general solution ☆

The problem solving process emphasizes a "first, do-it-by-hand" approach because

a) Pseudocode is not able to capture the subtleties of complex problems.
b) it is faster to do computations by hand than to do them by computer.
c) this guarantees that programs will be correct.
d) if programmers cannot compute a solution by hand, it is unlikely they will be able to write a program that can do it.

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What is the output of the following code snippet?

c) Code will not compile ☆

String firstname = "William";
String lastname;
System.out.println("First: " + first);
System.out.println("Last: " + lastname);

a) First: William
Last:
b) First: William
Last: lastname
c) Code will not compile
d) Unpredictable output

What is the correct way to invoke methods on variables in Java that are strings?

a) Methods can only be invoked on string constants, not on variables.
b) For each method there is a special operator that must be used.
c) There are no methods available in Java for string variables.
d) Invoke them using the variable name and the dot (.) notation.

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Suppose a phone number, stored as a ten-character string (of digits only) called phoneNumber, must be converted into a string that

d) String newNumber = "(" + phoneNumber.substring(0, 3) + ")" + phoneNumber.substring(3, 10); ☆

has parentheses around the area code. Which statement below will do that?

a) String newNumber = "(" + phoneNumber.substring(3, 0) + ")";
b) String newNumber = "(" + ")" + phoneNumber;
c) String newNumber = "(" + phoneNumber.substring(1, 3) + ")" + phoneNumber.substring(3, 7);
d) String newNumber = "(" + phoneNumber.substring(0, 3) + ")" + phoneNumber.substring(3, 10);

Which of the following options defines an integer variable?

a) char age;
b) integer age;
c) int age;
d) age: int;

c) int age; ☆

Which statement is true about variable names in Java?

a) They can contain the percent sign (%)
b) They can contain an underscore symbol ("_")
c) They can contain spaces

b) They can contain an underscore symbol ("_") ☆

d) They must make sense as a word	
Consider the following Java variable names: I. 1stInstance II. basicInt% III. empName_ IV. addressLine1 V. DISCOUNT Which of the following options is correct? a) Only IV is a valid Java variable name. b) Only I and IV are valid Java variable names. c) Only I, IV, and V are valid Java variable names. d) Only III, IV, and V are valid Java variable names.	d) Only III, IV, and V are valid Java variable names. ☆
Which is the appropriate time to initialize a variable? a) When you define it b) When you use it c) At the end of the program d) Before the main function	a) When you define it ☆
What is the result of the following code snippet? double bottles; double bottleVolume = bottles * 2; System.out.println(bottleVolu	d) Does not compile ☆

me); a) 0 b) 1 c) 2 d) Does not compile	

Which one of the following is a correct method for defining and initializing an integer variable with name value?
 	
a) int value = 30;
b) Int value = 30;
c) int value = .30;
d) Int value = .30;
	a) int value = 30; ☆

What is wrong with the following code snippet?
 	
int size = 42;
cost = 9.99;
System.out.println("size = " + size);
System.out.println(" cost = " + cost);
 	
a) The code snippet uses a variable that has not yet been initialized.
b) The code snippet uses a variable that has not been declared.
c) The code snippet attempts to assign a decimal value to an integer variable.
d) The code snippet attempts
	b) The code snippet uses a variable that has not been declared. ☆

to assign an integer value to a decimal variable.	
Which one of the following reserved words is used in Java to represent a value without a fractional part? a) integer b) int c) Int d) Float	b) int ☆
In an airline reservation system, the number of available seats in an airplane is required. Which data type should be used to store this value? a) double b) float c) int d) long	c) int ☆
In an airline reservation system, the cost of an airline ticket is required. Which data type should be used to store this value? a) int b) byte c) double d) short	c) double ☆
What is wrong with the following code snippet?	d) The price variable is assigned a decimal value. ☆

int price;
price = 9.42;

a) The price variable is never initialized.
b) The data type for the price variable is not specified.
c) The price variable is never assigned a value.
d) The price variable is assigned a decimal value.

Which one of the following is an assignment statement?

a) int a = 20;
b) a = 20;
c) assign a = 20;
d) assign 20 to a;

b) a = 20; ☆

Which one of the following types of statements is an instruction to replace the existing value of a variable with another value?

a) Update
b) Declaration
c) Assignment
d) Initialization

c) Assignment ☆

What is the meaning of x = 0; in Java?

a) It checks whether x equals 0.
b) It sets the variable x to

b) It sets the variable x to zero. ☆

zero. c) It defines a variable named x and initializes it with 0. d) It is a syntax error because x is not always 0.	

What are the values of num1 and num2 after this snippet executes?
 	
double num1 = 4.20;
double num2 = num1 * 10 + 5.0;
 	
a) num1 = 4.20 and num2 = 63.0
b) num1 = 4.20 and num2 = 47.0
c) num1 = 42.0 and num2 = 42.0
d) num1 = 42.0 and num2 = 47.0
	b) num1 = 4.20 and num2 = 47.0 ☆

Which of the following statements places input into the variable value given this line of code?
 	
Scanner in = new Scanner(System.in);
 	
a) int value = in();
b) int value = in.nextInt();
c) int value = in.next();
d) int value = in.nextFloat();
	b) int value = in.nextInt(); ☆

Assuming that the user inputs a value of 30 for the price	c) The new price is 27.0 ☆

and 10 for the discount rate in the following code snippet, what is the output?

```
Scanner in = new Scanner(System.in);
System.out.print("Enter the price: ");
double price = in.nextDouble();

System.out.print("Enter the discount rate: ");
double discount = in.nextDouble();

System.out.print("The new price is ");
System.out.println(price - price * (discount / 100.0));
```

a) The new price is 30
b) The new price is 20
c) The new price is 27.0
d) The new price is 33.0

Which of the following statements is correct about constants?

a) Constants are written using uppercase letters because the compiler ignores constants declared in lowercase letters.

d) Variables defined using final make a code snippet more readable and easier to maintain. ☆

b) The data stored inside a final variable can be changed using an assignment statement. c) You can make a variable constant by using the constant reserved word while declaring the variable. d) Variables defined using final make a code snippet more readable and easier to maintain.	
What is the value of Math.pow(2, 3)? a) 5 b) 6 c) 8 d) 9	c) 8 ☆
Which one of the following is a correct representation of the given mathematical expression in Java? a) a - b / 2 % 2 b) a - b / 2 c) a - (b / 2) / 2 d) (a - b / 2) / 2	d) (a - b / 2) / 2 ☆
Given the definition final double PI = 3.14159; which of the following is the Java equivalent of the mathematical expression c = radius2	c) c = PI * Math.pow(radius, 2); ☆

a) c = PI * (radius * 2);
b) c = PI * Math.pow(2, radius);
c) c = PI * Math.pow(radius, 2);
d) c = Math.pow(PI * radius, 2);

Which of the following is the mathematical equivalent of the following Java expression?

h = (4.0 * a * b - Math.pow(b, 2)) / c;

a) h = 4ab - 2b / c
b) h = (4ab - 2b) / c
c) h = 4ab - b2 / c
d) h = (4ab - b2) / c

d) h = (4ab - b2) / c ☆

Which of the following statements displays

price = 20.00

a) System.out.print("price = ");
System.out.printf(price);
b) System.out.print("price = ");
System.out.printf("%f", price);
c) System.out.print("price = ");
System.out.printf("%10.2f", price);
d) System.out.print("price =

c) System.out.print("price = ");
System.out.printf("%10.2f", price); ☆

"); System.out.printf("%2.10f", price);	
What is the output of the following code snippet? System.out.printf("%5.3f", 20.0); a) 20 b) 20.0 c) 20.00 d) 20.000	d) 20.000 ☆