

1. Which statement best describes a computer program?

- A. A program is a sequence of comments.
- B. A program can decide what task it is to perform.
- C. A program is a sequence of instructions and decisions that the computer carries out. Answer
- D. A program can only perform one simple task.

Section Ref	Section 1.1 Computer Programs
diff	1
Title	Which statement best describes a computer program?
type	mc
section	1.1 Computer Programs
id	testbank-bj-6-ch01-1

2. Which statement regarding computer programs is correct?

- A. Computer programs can decide what task to perform.
- B. Large and complex computer programs are generally written by only one programmer.
- C. Computer programs are composed of extremely primitive operations. Answer
- D. Small computer programs are not documented.

diff	1
Title	Which statement regarding computer programs is correct?
type	mc
section	1.1 Computer Programs
Section reference	Section 1.1 Computer Programs
id	testbank-bj-6-ch01-2

3. What is an example of a typical instruction in a computer program?

- A. Add up two numbers. Answer
- B. Lay out a term paper.
- C. Drive a car.
- D. Display a fancy font.

diff	1
Title	What is an example of a typical instruction in a computer program?
type	mc
section	1.1 Computer Programs
Section reference	Section 1.1 Computer Programs
id	testbank-bj-6-ch01-3

4. What does CPU stand for?

- A. Computer Programming Unit
- B. Computer Processing Unit
- C. Central Processing Unit Answer
- D. Central Programming Unit

Section Ref	Section 1.2 The Anatomy of a Computer
diff	1
Title	What does CPU stand for?
type	mc
section	1.2 The Anatomy of a Computer
id	testbank-bj-6-ch01-4

5. Which one of the following is NOT a function of a CPU?

- A. Performing arithmetic operations

- B. Processing data and controlling programs
- C. Querying a database **Answer**
- D. Fetching and storing data from storage and input devices

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which one of the following is NOT a function of a CPU?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-5

6. Which type of storage is made from electronic circuits that can store data?

- A. compact disk (CD)
- B. hard disk
- C. primary storage **Answer**
- D. secondary storage

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which type of storage is made from electronic circuits that can store data?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-6

7. Which one of the following memory types provides storage that persists without electricity?

- A. primary storage
- B. RAM
- C. memory
- D. secondary storage **Answer**

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which one of the following memory types provides storage that persists without electricity?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-7

8. Which one of the following memory types provides storage that is slower and less expensive?

- A. primary storage
- B. secondary storage **Answer**
- C. peripheral device
- D. the transistor

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which one of the following memory types provides storage that is slower and less expensive?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-8

9. Which type of secondary storage consists of rotating platters coated with a magnetic material?

- A. hard disk **Answer**
- B. solid state drive
- C. compact disk (CD)
- D. memory

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which type of secondary storage consists of rotating platters coated with a magnetic material?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-9

10. Some computers are self-contained units; others are interconnected through what?

- A. bus
- B. networks **Answer**
- C. peripheral devices
- D. power lines

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Some computers are self-contained units; others are interconnected through what?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-10

11. Which is an example of a peripheral device?

- A. the CPU
- B. primary storage
- C. motherboard
- D. speakers **Answer**

Section Ref Section 1.2 The Anatomy of a Computer
diff 1
Title Which is an example of a peripheral device?
type mc
section 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-11

12. Which memory type does not provide persistent storage?

- A. secondary storage
- B. hard disk
- C. primary storage **Answer**
- D. DVD

diff 1
Title Which memory type does not provide persistent storage?
type mc
section 1.2 The Anatomy of a Computer
Section reference 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-12

13. Where must program instructions and data reside in order for the CPU to directly read and execute them?

- A. memory **Answer**
- B. bus
- C. hard disk
- D. somewhere on the computer network

diff 1
Title Where must program instructions and data reside in order for the CPU to read and execute them?
type mc
section 1.2 The Anatomy of a Computer

Section reference 1.2 The Anatomy of a Computer
id testbank-bj-6-ch01-13

14. What term is used to refer to the computer instructions that are executed by a CPU?

- A. virtual machine
- B. machine code **Answer**
- C. high-level code
- D. instruction set

Section Ref Section 1.3 The Java Programming Language
diff 1
Title What term is used to refer to the computer instructions that are executed by a CPU?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-14

15. What is the Java Virtual Machine?

- A. A CPU that runs compiled Java code.
- B. A library that makes it possible to write portable programs.
- C. A program that simulates a real CPU running compiled Java code. **Answer**
- D. A program that translates Java code into machine instructions.

diff 1
Title What is the JVM?
type mc
section 1.3 The Java Programming Language
Section reference 1.3 The Java Programming Language
id testbank-bj-6-ch01-15

16. What is the term used to refer to Java code that runs in a browser?

- A. applet **Answer**
- B. script
- C. html
- D. class

diff 1
Title What is the term used to refer to Java code that runs in a browser?
type mc
section 1.3 The Java Programming Language
Section reference 1.3 The Java Programming Language
id testbank-bj-6-ch01-16

17. What term is used to refer to languages that allow programmers to describe tasks at a higher conceptual level than machine code?

- A. virtual
- B. high-level **Answer**
- C. sophisticated
- D. conceptual

Section Ref Section 1.3 The Java Programming Language
diff 1
Title What term is used to refer to languages that allow programmers to describe tasks at a higher conceptual level than machine code?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-17

18. What tool translates high-level instructions into low level machine code?

- A. debugger
- B. assembler
- C. compiler **Answer**
- D. linker

Section Ref Section 1.3 The Java Programming Language
diff 1
Title What tool translates high-level instructions into low level machine code?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-18

19. What tool translates Java source code into files that contain instructions for the Java Virtual Machine?

- A. linker
- B. compiler **Answer**
- C. assembler
- D. interpreter

Section Ref Section 1.3 The Java Programming Language
diff 1
Title What tool translates Java source code into files that contain instructions for the Java Virtual Machine?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-19

20. Which statement is true about running a Java program on a different CPU?

- A. You need different Java source code for each CPU.
- B. You can take code that has been generated by the Java compiler and run it on different CPUs. **Answer**
- C. You need to compile the Java program for each CPU.
- D. You cannot run the program on a different CPU because Java, being a high-level programming language, is machine dependent.

Section Ref Section 1.3 The Java Programming Language
diff 2
Title Which statement is true about running a Java program on a different CPU?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-20

21. When was Java officially introduced?

- A. 1991
- B. 1995 **Answer**
- C. 2000
- D. 2005

Section Ref Section 1.3 The Java Programming Language
diff 1
Title When was Java officially introduced?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-21

22. Which statement best describes the portability characteristic of Java?

- A. The same already-compiled Java programs will run on Windows, UNIX, Linux, or Macintosh operating systems without any change. **Answer**
- B. The same Java compiler can be used on many operating systems.
- C. There are only small differences between the Java programming language on different operating systems.
- D. It is easy to change a Java program so that it will work on different operating systems.

Section Ref Section 1.3 The Java Programming Language
diff 1
Title Which statement best describes the portability characteristic of Java?
type mc
section 1.3 The Java Programming Language
id testbank-bj-6-ch01-22

23. No matter which Java development environment you use, what happens to the Java source code in order for a Java program to execute?

- A. The source code is automatically separated into many files.
- B. The source code is backed up to a network storage facility.
- C. A Java compiler converts all uppercase letters to lowercase.
- D. A Java compiler translates the source code into class files. **Answer**

diff 1
Title No matter which Java development environment you use, what happens to the Java source code in order for a Java program to execute?
type mc
section 1.4 Becoming Familiar with Your Programming Environment
Section reference 1.4 Becoming Familiar With Your Programming Environment
id testbank-bj-6-ch01-23

24. Why should you set aside time to become familiar with the programming environment?

- A. The time you spend will prevent data loss without the need for backups.
- B. The tools needed for Java programming are different from other software. **Answer**
- C. Although computer systems vary widely, the Java programming environment is always the same.
- D. The Java libraries are detailed and extensive.

diff 1
Title Why should you set aside time to become familiar with the programming environment?
type mc
section 1.4 Becoming Familiar with Your Programming Environment
Section reference 1.4 Becoming Familiar With Your Programming Environment
id testbank-bj-6-ch01-24

25. Suppose that a computer virus infects your computer and corrupts the files you were going to submit for your current homework assignment. What precaution could have saved you from a disastrously bad grade for this assignment?

- A. Defragment the hard drive.
- B. Purchase an anti-virus program to remove the virus from your computer.
- C. Make regular backups of all your important files. **Answer**
- D. Purchase an extended warranty for your computer.

Section Ref 1.4 Becoming Familiar With Your Programming Environment
diff 1
Title What can prevent you from losing files that get corrupted?
type mc
section 1.4 Becoming Familiar with Your Programming Environment
id testbank-bj-6-ch01-25

26. Which statement regarding backup strategies for Java files is correct?

- A. You should have multiple copies of your source files in different locations. **Answer**
- B. You should regularly print out your work so you can retype it in case of data loss.
- C. You should regularly back up the Java virtual machine instructions to prevent loss of valuable work.
- D. Your compiler automatically makes backups of your source files.

diff 1
Title Which one of the following statements regarding backup strategies for Java files is correct?
type mc
section 1.4 Becoming Familiar with Your Programming Environment
Section reference 1.4 Becoming Familiar With Your Programming Environment
id testbank-bj-6-ch01-26

27. The line `public class HelloPrinter` indicates which declaration below?

- A. Declaration of the variable `class`.
- B. Declaration of the class `HelloPrinter`. **Answer**
- C. Declaration of the variable `public`.
- D. Declaration of the class `public`.

diff 1
Title The line public class HelloPrinter indicates which declaration below?
type mc
section 1.5 Analyzing Your First Program
Section reference 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-27

28. Every Java program consists of one or more of these fundamental building blocks.

- A. class **Answer**
- B. CPU
- C. applet
- D. parameter

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title TB Every Java program consists of one or more of these fundamental building blocks.
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-28

29. What is the name of the file that contains the Java source code for the public class `HelloPrinter`?

- A. `HelloPrinter`
- B. `HelloPrinter.java` **Answer**
- C. `HelloPrinter.class`
- D. `HelloPrinter.txt`

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What is the name of the file that contains the Java source code for this class?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-29

30. A _____ contains sequences of programming instructions that describe how to perform a particular task.

- A. parameter

- B. label
- C. variable
- D. method **Answer**

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title A _____ contains sequences of programming instructions that describe how to perform a particular task.
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-30

31. What term is used to refer to an individual instruction inside a method?

- A. statement **Answer**
- B. constant
- C. comment
- D. object

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What term is used to refer to an individual instruction inside a method?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-31

32. In Java, every statement must end with which symbol?

- A. .
- B.)
- C. !
- D. ; **Answer**

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title In Java, every statement must end with this symbol.
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-32

33. What term is used to refer to a sequence of characters enclosed in quotation marks?

- A. string **Answer**
- B. object
- C. comment
- D. variable

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What term is used to refer to a sequence of characters enclosed in quotation marks?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-33

34. What term is used to refer to values supplied to a method that are needed to carry out its task?

- A. class
- B. object
- C. argument **Answer**
- D. comment

Section Ref	Section 1.5 Analyzing Your First Program
diff	1
Title	What term is used to refer to values supplied to a method that are needed to carry out its task?
type	mc
section	1.5 Analyzing Your First Program
id	testbank-bj-6-ch01-34

35. Arguments supplied to methods are enclosed by which symbols?

- A. () **Answer**
- B. " "
- C. {}
- D. //

Section Ref	Section 1.5 Analyzing Your First Program
diff	1
Title	Arguments supplied to methods are enclosed by which symbols?
type	mc
section	1.5 Analyzing Your First Program
id	testbank-bj-6-ch01-35

36. Whenever a method is called in Java, what must be specified?

- A. program name, method name
- B. strings, method name
- C. method name, arguments **Answer**
- D. the main method, arguments

Section Ref	Section 1.5 Analyzing Your First Program
diff	1
Title	Whenever a method is called in Java, what must be specified?
type	mc
section	1.5 Analyzing Your First Program
id	testbank-bj-6-ch01-36

37. What is the syntax for calling the `println` method on the object `System.out`?

- A. `println("Any message").System.out;`
- B. `System.out("Any message").println;`
- C. `System.out.println("Any message");` **Answer**
- D. `println(System.out, "Any message");`

Section Ref	Section 1.5 Analyzing Your First Program
diff	1
Title	What is the syntax for calling the <code>println</code> method on the object <code>System.out</code> ?
type	mc
section	1.5 Analyzing Your First Program
id	testbank-bj-6-ch01-37

38. What is the name of the method in the given method call?

```
System.out.println("Welcome");
```

- A. `"Welcome"`
- B. `System`
- C. `println` **Answer**
- D. `out`

Section Ref	Section 1.5 Analyzing Your First Program
diff	1
Title	What is the name of the method in the given method call?

type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-38

39. What is the argument in the given method call?

```
System.out.println("Welcome");
```

- A. `out`
- B. `println`
- C. `"Welcome"` **Answer**
- D. `System`

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What is the argument in the given method call?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-39

40. What is the output of the following Java statement?

```
System.out.println("4 + 6");
```

- A. `10`
- B. `46`
- C. `4`
- D. `4 + 6` **Answer**

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What is the output of the following Java statement?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-40

41. What is the output of the following Java statement?

```
System.out.println(4 + 6);
```

- A. `4 + 6`
- B. `4`
- C. `10` **Answer**
- D. `46`

Section Ref Section 1.5 Analyzing Your First Program
diff 1
Title What is the output of the following Java statement?
type mc
section 1.5 Analyzing Your First Program
id testbank-bj-6-ch01-41

42. Which statement is true about the following Java code fragment:

```
System.out.println("Hello!");
```

- A. There is a run-time error.
- B. There are no errors.
- C. There is a compile-time error. **Answer**
- D. There are multiple errors.

diff 1
Title Which statement is true about the following Java code fragment?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-42

43. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.println("Helo!");
```

- A. There is a run-time error. **Answer**
- B. There are no errors.
- C. There is a compile-time error.
- D. There are multiple errors.

diff 1
Title Which statement is true about the following Java code fragment?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-43

44. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.println("Hello!");
```

- A. There is a run-time error.
- B. There are no errors. **Answer**
- C. There is a compile-time error.
- D. There are multiple errors.

diff 1
Title Which statement is true about the following Java code fragment?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-44

45. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.printn("Helo!");
```

- A. There is a run-time error.
- B. There are no errors.
- C. There is a compile-time error.
- D. There are multiple errors. **Answer**

diff 1
Title Which statement is true about the following Java code fragment?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-45

46. Assume that the following Java statement is contained in the `main` method of the class named `Hello`:

```
System.out.println("Hello!");
```

What is the name of the file generated by the Java compiler?

- A. Hello.java
- B. Hello
- C. No file is generated due to an error. **Answer**
- D. Hello.class

diff 1
Title What is the name of the file generated by the Java compiler?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-46

47. What is a logic error?

- A. A violation of the rules of the computer language.
- B. A missing `main` method.
- C. A program that is syntactically correct but does not do what it is supposed to do. **Answer**
- D. An error that is so severe that it generates an exception.

diff 1
Title What is a logic error?
type mc
section 1.6 Errors
Section reference 1.6 Errors
id testbank-bj-6-ch01-47

48. What is the term used to describe an error detected by the compiler that is a violation of the programming language rules?

- A. logic error
- B. compile-time error **Answer**
- C. run-time error
- D. typo

Section Ref Section 1.6 Errors
diff 1
Title Term describing an error violating the programming language rules.
type mc
section 1.6 Errors
id testbank-bj-6-ch01-48

49. Other than compile-time error, what is another term used to describe an error detected by the compiler that is a violation of the programming language rules?

- A. typo
- B. logic error
- C. syntax error **Answer**
- D. run-time error

Section Ref Section 1.6 Errors
diff 1
Title Another term describing an error violating the programming language rules.
type mc
section 1.6 Errors
id testbank-bj-6-ch01-49

50. What is the term used to describe an error causing a program to take an action that the programmer did not intend?

- A. typo
- B. run-time error Answer
- C. compile-time error
- D. syntax error

Section Ref	Section 1.6 Errors
diff	1
Title	Term describing an error causing a program to take an action that the programmer did not intend)
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-50

51. Other than run-time error, what is another term used to describe an error causing a program to take an action that the programmer did not intend?

- A. syntax error
- B. logic error Answer
- C. mistake
- D. compile-time error

Section Ref	Section 1.6 Errors
diff	1
Title	Another term describing an error causing a program to take an action that the programmer did not intend)
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-51

52. Which statement is true about the following Java statement:

```
System.out.println("Welcome!");
```

- A. There are multiple errors.
- B. There are no errors.
- C. There is a run-time error.
- D. There is a compile-time error. Answer

Section Ref	Section 1.6 Errors
diff	1
Title	Which statement is true about the following Java statement?
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-52

53. Assuming the programmer wishes to output the phrase "Hello!", which of the following is true about the following Java statement:

```
System.out.println("Welcme!");
```

- A. There are multiple errors.
- B. There is a run-time error. Answer
- C. There are no errors.
- D. There is a compile-time error.

Section Ref	Section 1.6 Errors
diff	1
Title	Which statement is true about the following Java statement?
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-53

54. Assuming the programmer wishes to output the phrase "Welcome!", Which statement is true about the following Java statement:

```
System.out.println("Welcome!");
```

- A. There are no errors. **Answer**
- B. There is a run-time error.
- C. There are multiple errors.
- D. There is a compile-time error.

Section Ref	Section 1.6 Errors
diff	1
Title	Which statement is true about the following Java statement?
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-54

55. Assuming the programmer wishes to output the phrase "Welcome!", which of the following is true about the following Java statement.

```
System.out.Println("Wlcome!");
```

- A. There are no errors.
- B. There is a compile-time error.
- C. There is a run-time error.
- D. There are multiple errors. **Answer**

Section Ref	Section 1.6 Errors
diff	1
Title	Which statement is true about the following Java statement?
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-55

56. Assume that the `main` method of the class named `Welcome` does not contain any compile-time errors. What is the name of the file generated by the Java compiler?

- A. `Welcome.class` **Answer**
- B. `Welcome.java`
- C. No additional file is generated.
- D. `Welcome`

Section Ref	Section 1.6 Errors
diff	1
Title	Assume that the main method of the class named Welcome does not contain any compile-time errors. What is the name of the file generated by the Java compiler?
type	mc
section	1.6 Errors
id	testbank-bj-6-ch01-56

57. Which statement is true about the compilation process?

- A. The compiler will generate CPU specific instructions even if it detects an error.
- B. The compiler will generate Java virtual machine instructions even if it detects an error.
- C. The compiler will stop compiling when it finds the first error.
- D. The compiler will continue compiling after it finds an error. **Answer**

Section Ref	Section 1.6 Errors
diff	1
Title	Which statement is true about the compilation process?
type	mc

section id 1.6 Errors
testbank-bj-6-ch01-57

58. Who or what is responsible for inspecting and testing the program to guard against logic errors?

- A. JVM
- B. programmer **Answer**
- C. end-user
- D. compiler

Section Ref Section 1.6 Errors
diff 1
Title Who/what is responsible for ... guarding against logic errors?
type mc
section 1.6 Errors
id testbank-bj-6-ch01-58

59. If you get a sequence of error messages from the compiler that are increasingly off track, you should

- A. check for division by zero
- B. restructure your code to make it more readable
- C. check for spelling, capitalization, or missing quotation marks **Answer**
- D. include more of your code within the `main` method

Section Ref Section 1.6 Errors
diff 1
Title If you get a sequence of error messages from the compiler that are increasingly off track, you should
type mc
section 1.6 Errors
id testbank-bj-6-ch01-59

60. The error message "cannot find symbol" is usually a good clue that what kind of error has been made?

- A. logic
- B. spelling **Answer**
- C. run-time
- D. division by zero

Section Ref Section 1.6 Errors
diff 1
Title The error message "cannot find symbol" is usually a good clue that what kind of error has been made?
type mc
section 1.6 Errors
id testbank-bj-6-ch01-60

61. A sequence of steps that contains precise instructions for what to do at each step and where to go next is

_____.

- A. unambiguous **Answer**
- B. terminating
- C. executable
- D. documented

diff 1
Title A sequence of steps that contains precise instructions...?
type mc
section 1.7 Problem Solving: Algorithm Design
Section reference 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-61

62. A sequence of steps that can be carried out in practice is _____.

- A. unambiguous
- B. terminating
- C. executable **Answer**
- D. documented

diff 1
Title A sequence of steps that can be carried out in practice ...?
type mc
section 1.7 Problem Solving: Algorithm Design
Section reference 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-62

63. A sequence of steps that eventually comes to an end is _____.

- A. unambiguous
- B. terminating **Answer**
- C. executable
- D. documented

diff 1
Title A sequence of steps that eventually comes to an end ...?
type mc
section 1.7 Problem Solving: Algorithm Design
Section reference 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-63

64. What is the purpose of the following algorithm?

```
input somenum
Repeat the following steps for 14 times
  input variable1
  if variable1 < somenum then
    somenum = variable1
print somenum
```

- A. To search for a particular number among 15 numbers.
- B. To find the largest among 15 numbers.
- C. To print out the 15 numbers.
- D. To find the smallest among 15 numbers. **Answer**

diff 1
Title What is the purpose of the following algorithm?
type mc
section 1.7 Problem Solving: Algorithm Design
Section reference 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-64

65. Evaluate the given pseudocode to calculate the efficiency of a vehicle's fuel consumption using the following test values, rounded to one decimal place:

The trip odometer reading (odometer) = 350

The amount to fill the gas tank (amount) = 12

input odometer

input amount

output odometer/amount

What is the final output?

A. 27.7

B. 29.2 Answer

C. 34.4

D. 32.3

diff	2
Title	What is output of this pseudocode with these test values?
type	mc
section	1.7 Problem Solving: Algorithm Design
Section reference	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-65

66. Evaluate the given pseudocode to calculate the weighted score for a student:

The homework score (homework) = 95

The weight of homework (hwWeight) = 35%

The exam score (exams) = 87

The weight of exams(exWeight) = 65%

input homework

input hwWeight

input exams

input exWeight

output homework*hwWeight + exams*exWeight

What is the final output?

A. 89.20

B. 89.80 Answer

C. 87.80

D. 92.20

diff	2
Title	What is the final output?
type	mc
section	1.7 Problem Solving: Algorithm Design
Section reference	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-66

67. Evaluate the given pseudocode to calculate the payment (pmt) with the following test values:

The total number of hours worked (working_hours) = 60

The rate paid for hourly work (rate) = 12

```

input working_hours
input rate
pmt = working_hours * rate
if working_hours > 40 then
    extra_hours = working_hours - 40
    extra_pmt = extra_hours * rate
    pmt = pmt + extra_pmt
output pmt

```

What is the final output?

- A. 960 Answer
- B. 840
- C. 240
- D. 720

diff	3
Title	What is output of this pseudocode with these test values?
type	mc
section	1.7 Problem Solving: Algorithm Design
Section reference	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-67

68. What term is used to refer to an informal description of a sequence of steps for solving a problem?

- A. assembly language instructions
- B. pseudocode Answer
- C. machine instructions for a specific CPU
- D. Java virtual machine instructions

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	1
Title	What term is used to refer to an informal description of a sequence of steps for solving a problem?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-68

69. What term is used to refer to a sequence of steps for solving a problem that is unambiguous, executable, and terminating?

- A. documentation
- B. pseudoprogram
- C. algorithm Answer
- D. comments

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	1
Title	What term is used to refer to a sequence of steps for solving a problem that is unambiguous, executable, and terminating?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-69

70. Which of the following options is true about algorithms?

- A. Algorithms are described informally and can contain ambiguous steps.

- B. Algorithms are written in a programming language.
- C. Algorithms can replace the source code in programs.
- D. You must create an algorithm for a problem before you can create a program to solve the problem. **Answer**

Section Ref Section 1.7 Problem Solving: Algorithm Design
diff 1
Title Which of the following options is true about algorithms?
type mc
section 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-70

71. A sequence of steps is unambiguous when _____

- A. it will eventually come to an end.
- B. it is clearly documented.
- C. it can be carried out in practice.
- D. there are precise instructions for what to do at each step and where to go next. **Answer**

Section Ref Section 1.7 Problem Solving: Algorithm Design
diff 1
Title A sequence of steps is unambiguous when ...?
type mc
section 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-71

72. A sequence of steps is executable when _____

- A. it will eventually come to an end.
- B. it can be carried out in practice. **Answer**
- C. it is documented.
- D. there are precise instructions for what to do at each step and where to go next.

Section Ref Section 1.7 Problem Solving: Algorithm Design
diff 1
Title A sequence of steps is executable when ...?
type mc
section 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-72

73. A sequence of steps is terminating when _____

- A. there are precise instructions for what to do at each step and where to go next.
- B. it will eventually come to an end. **Answer**
- C. it can be documented.
- D. it can be carried out in practice.

Section Ref Section 1.7 Problem Solving: Algorithm Design
diff 1
Title A sequence of steps is terminating when ...?
type mc
section 1.7 Problem Solving: Algorithm Design
id testbank-bj-6-ch01-73

74. What is the purpose of the following algorithm?

input num
Repeat the following steps for 9 times
input var1

```
if var1 > num then
    num = var1
print num
```

- A. To print out the 10 numbers
- B. To search for a particular number among 10 numbers
- C. To find the largest among 10 numbers **Answer**
- D. To find the smallest among 10 numbers

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	1
Title	What is the purpose of the following algorithm?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-74

75. Evaluate the given pseudocode to calculate the efficiency of a vehicle's fuel consumption using the following test values:

The trip odometer reading (odometer) = 300

The amount to fill the gas tank (amount) = 15

```
input odometer
input amount
output odometer/amount
```

What is the final output?

- A. 15
- B. 10
- C. 30
- D. 20 **Answer**

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	2
Title	What is output of this pseudocode with these test values?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-75

76. Evaluate the given pseudocode to calculate the weighted score for a student:

The program score (program) = 92

The weight of programs (pgmWeight) = 40%

The exam score (exams) = 85

The weight of exams(exWeight) = 60%

```
input program
input pgmWeight
input exams
```

input exWeight

output program*pgmWeight + exams*exWeight

What is the final output?

A. 89.20

B. 87.80 Answer

C. 89.80

D. 92.20

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	2
Title	What is output of this pseudocode with these test values?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-76

77. Evaluate the given pseudocode to calculate the payment (pmt) with the following test values:

The total number of hours worked (working_hours) = 50

The rate paid for hourly work (rate) = 10

input working_hours

input rate

pmt = working_hours * rate

if working_hours > 40 then

 extra_hours = working_hours - 40

 extra_pmt = extra_hours * rate

 pmt = pmt + extra_pmt

end of if

output pmt

What is the final output?

A. 540

B. 580

C. 500

D. 600 Answer

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	3
Title	What is output of this pseudocode with these test values?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-77

78. What is the correct order of the steps in the program development process:

i. Develop and describe the algorithm.

ii. Translate the algorithm into Java.

iii. Understand the problem.

- iv. Compile and test the program.
- v. Test the algorithm with different inputs.

- A. iii, i, ii, iv, v
- B. i, ii, iv, v, iii
- C. iii, i, v, ii, iv **Answer**
- D. i, iii, v, ii, iv

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	1
Title	What is the order of the steps in the program development process?
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-78

79. Pseudocode must be

- i. Unambiguous.
- ii. Syntactically correct code.
- iii. Readable by a human.
- iv. Indicative of results of an algorithm.

- A. i, ii
- B. i, ii, iii
- C. i, iii, iv **Answer**
- D. ii, iii, iv

Section Ref	Section 1.7 Problem Solving: Algorithm Design
diff	1
Title	Pseudocode must be
type	mc
section	1.7 Problem Solving: Algorithm Design
id	testbank-bj-6-ch01-79