Which of the following is correct syntax to declare C++ class B to be a public base class for derived class D

|  |  |
| --- | --- |
|  | public base class B: class D {/\*…\*/}; |
|  | class D : public class B  {/\* … \*/}; WRONG |

|  |  |
| --- | --- |
|  | class D : public B {/\* … \*/}; |
|  | class B: public D { }; |

|  |  |
| --- | --- |
|  | None of the above |

The functions or data members declared in the private: section of a class can be accessed only in the definition of those functions declared in that class.

|  |  |
| --- | --- |
|  | True |

A class can have friends that are functions as well as friend classes.

|  |  |
| --- | --- |
|  | True |

A derived class object inherits all the members of the base class. Which of these remarks about the inherited member variables is not true?

|  |  |
| --- | --- |
|  | Inherited members are need to be allocated memory and should be initialized at creation of a derived class object.  WRONG |
|  | Inherited members are will be automatically managed by the C++ runtime system, so can be safely ignored. |

|  |  |
| --- | --- |
|  | Inherited members’ memory allocation must be done by the base class constructor for the base class, which must be called. |
|  | The base class constructor is the most convenient place to initialize these inherited variables. |

|  |  |
| --- | --- |
|  | None of the above. |

An inheritance chain of any desired length is possible.

|  |  |
| --- | --- |
|  | True |

If a base class constructor is not called explicitly in the definition of a derived class constructor, an error results.

|  |  |
| --- | --- |
|  | False |

In which of these situations would member wise assignment be done?

|  |  |
| --- | --- |
|  | a) When an object is copied to another using the = operator. |
|  | b) When one object is initialized with another object's data. |

|  |  |
| --- | --- |
|  | c) When an object contains a pointer to dynamically allocated memory. |
|  | a) and b) CORRECT |

|  |  |
| --- | --- |
|  | a) and c) |

Given the class definition:

class A

{

public:

  //constructors

  // other members

private:

  int x;

  int y;

};

Which declaration of operator functions to overload operator + as a friend function

|  |  |
| --- | --- |
|  | friend const A operator+(const A& lhs, const A& rhs); |

A constructor is like a function. It can return any type value needed.

|  |  |
| --- | --- |
|  | False |

If a class represents an amount of money (in US currency like $9.99), then the amount (like $9.99) could reasonably be stored in:

|  |  |
| --- | --- |
|  | A member variable of type double. WRONG |
|  | Two member variables of type int. |

|  |  |
| --- | --- |
|  | A string of characters (like "9.99"). |
|  | All the above. |

If class D is derived from class B, then we say that class D inherits from class B.

|  |  |
| --- | --- |
|  | True |

A programmer must have the source code for libraries to extend them, even using inheritance.

|  |  |
| --- | --- |
|  | False |

A class is a self-contained block of data and functions.

|  |  |
| --- | --- |
|  | True |

The \_\_\_\_\_\_\_ member function takes a single char value from the input file, without regard to whether it is whitespace.

|  |  |
| --- | --- |
|  | get |

You cannot open a file for both input and output.

|  |  |
| --- | --- |
|  | False |

When working on a larger program you should not give all your output files the same name.

|  |  |
| --- | --- |
|  | True |

You should always close a file when you are finished with it.

|  |  |
| --- | --- |
|  | True |

If you open an already existing file for output all current content will be deleted.

|  |  |
| --- | --- |
|  | True |

An output stream is a stream of data flowing from your program, either to a file, or to the screen.

|  |  |
| --- | --- |
|  | True |

The operating system will close the file open for reading when you get to the end of the file.

|  |  |
| --- | --- |
|  | False |

Which of the following is not true about making the variables in a class private?

|  |  |
| --- | --- |
|  | It enforces encapsulation  WRONG |
|  | You could use protected in a parent or base class |

|  |  |
| --- | --- |
|  | It prevents any global data which would be bad |
|  | It allows use of the same identifier in different classes |

Consider the class inheritance.

**class B**

**{**

**public:**

**B();**

**B(int nn);**

**void f();**

**void g();**

**private:**

**int n;**

**};**

**class D: private B**

**{**

**public:**

**D(int nn, float dd);**

**void h();**

**private:**

**double d;**

**};**

Which of the following functions can be invoked by an object of class D?

|  |  |
| --- | --- |
|  | h() |

The this pointer always points to the instance of the class making the function call.

|  |  |
| --- | --- |
|  | True |

When developing a class hierarchy any is-a relation requires a base and derived class relation.

|  |  |
| --- | --- |
|  | True |

Concerning nested classes, which of the following is not true?

|  |  |
| --- | --- |
|  | The inner class must always be public |

I want to have a nonmember function to have access to the private members of a class. The class must declare that function a:

|  |  |
| --- | --- |
|  | friend |
|  | inline |

|  |  |
| --- | --- |
|  | Static WRONG |
|  | None of the above nonmember functions cannot have the access described here. WRONG |

You must always have mutators and accessor functions.

|  |  |
| --- | --- |
|  | False |

You have a file that is not empty, and you want to preserve the contents and append to the end of the file. Which statement should you use?

|  |  |
| --- | --- |
|  | outStream.open(“myFile.txt”, ios::app); |

The following declaration is required to use files:

*#include "fstream"*

|  |  |
| --- | --- |
|  | True |
|  | False |

A static variable of a class cannot be changed.

|  |  |
| --- | --- |
|  | False |

A programmer can use inheritance with an existing library for which only the header file and binary are available, to derive a class more suitable to her purpose.

|  |  |
| --- | --- |
|  | True |

The \_\_\_\_\_\_\_\_\_\_\_\_  fstream member function opens a file stream and connects the stream variable to a physical file whose name is the argument to the function.

|  |  |
| --- | --- |
|  | close( ) |
|  | overloaded operator <<( ) WRONG |

|  |  |
| --- | --- |
|  | open( ) |
|  | eof( ) |

|  |  |
| --- | --- |
|  | flush( ) WRONG |

When you use the open member function to tie a file name to a file stream, the file name is called the external file name, and the program refers to the file by the stream name.

|  |  |
| --- | --- |
|  | True |

A class is a self-contained block of data and functions.

True

The functions or data members declared in the private: section of a class can be accessed only in the definition of those functions declared in that class.

  True

A class member that is to be shared among all objects of a class is called

|  |  |
| --- | --- |
|  | A static member |

It is legal to call a constructor as a member function of an object of a class.

|  |  |
| --- | --- |
|  | False |