Alex Lundin

1. Primitive data types
   1. Bool, int, us long int, char, long int, float, us char, us short int, double, short int, us int, long double
2. No, the structure declaration creates the new data type
3. Arrays can be initialized in the declaration, structures must create a data type then initialize a variable with this brand new type.
4. Point Center;

Center.x = 12;

Center.y = 7;

Cout << center.x << endl;

Cout << center.y << endl;

1. Fullname Info;

Info.firstName = “Alex”;

Info.middleName = “Michael”;

Info.lastName = “Lundin”;

Cout << Info.firstName << “ “ << Info.middleName << “ “ << Info.lastName << endl;

1. Cout << inventory [48].partName << “ “ << inventory[48].idNumber << endl;
2. A.) Canton

B.) Haywood

C.) 9478

D.) this member is uninitialized

1. A.) r = new Rectangle;

B.) r -> length = 10;

r -> width = 14;

1. All the members of a union occupy the same memory area, meaning only one member can be used at a time. Unions conserve memory.
2. Eight bytes
3. 0 1 2
4. A.) valid

B.) invalid

C.) valid

D.) invalid

E.) valid

F.) valid

G.) invalid

1. Declared
2. Tag
3. Members
4. Semicolon
5. Tag
6. Dot
7. T
8. T
9. F
10. F
11. T
12. F
13. F
14. T
15. F
16. T
17. F
18. T
19. T
20. T
21. F
22. F
23. F
24. T
25. F
26. T
27. T
28. A class is the blueprint for objects, the instances of a class are the physical objects created by the blueprint.
29. The members name and age are private in the class and public in the structure.
30. Private by default.
31. Name of function is getradius()

The class is circle

1. Blueprints
2. A mutator function sets attribute values, a accessor function gets attributes values.
3. Yes, that way other parts of the program cannot change them.
4. Cin cout
5. Private
6. A construction is a member function that is automatically called when a class object is created.

A destructor is a member function that is automatically called when a class object is destroyed.

1. A default constructor takes no arguments. Can only have one default.
2. Yes you can have multiple constructors but only one destructor.
3. Yes, when the new operator executes so does the constructor.
4. Must specify the arguments for each object individually in a initializer list.
5. They describe a class’s purpose in terms of functionality.
6. 1.) Write a description of the problem domain

2.) Identify all nouns in the description

3.) Refine the list to include only classes relevant to problem

1. Procedural and object-oriented
2. Procedural
3. Object-oriented
4. Encapsulation
5. Constructor
6. Structure
7. Access specifier
8. Private
9. Public
10. Instance
11. Indirection
12. Mammal
13. 1
14. Inline
15. Constructor
16. Overloaded
17. Constructors
18. Return
19. Default
20. Destructor
21. Tilde
22. Return
23. Default
24. Arguments
25. Constructor, destructor
26. Private member function
27. F
28. T
29. F
30. T
31. F
32. F
33. T
34. T
35. F
36. T
37. T
38. F
39. T
40. F
41. T
42. T
43. F
44. F
45. T
46. F
47. F
48. T