14. When a class implements an interface, it must _____.

a. overload all of the methods listed in the interface

b. provide all of the nondefault methods that are listed in the interface, with the exact signatures and return types specified

c. not have a constructor

d. be an abstract class

15. Fields in an interface are _____.

a. final

b. static

c. both final and static

d. not allowed

16. Abstract methods must be _____.

a. overridden

b. overloaded

c. deleted and replaced with real methods

d. declared as private

17. Abstract classes cannot _____.

a. be used as superclasses

b. have abstract methods

c. be instantiated

d. have fields

18. You use the _____ operator to define an anonymous inner class.

a. class

b. inner

c. new

d. anonymous

19. An anonymous inner class must _____.

a. be a superclass

b. implement an interface

c. extend a superclass

d. either b or c.

20. A functional interface is an interface with _____.

a. only one abstract method.

b. no abstract methods.

c. only private methods.

d. no name.

21. You can use a lambda expression to instantiate an object that _____.

a. that has no constructor.

b. extends any superclass.

c. implements a functional interface

d. does not implement an interface.

31. **True** or False: When a class contains an abstract method, the class cannot be instantiated.

32. True or **False**: A class may only implement one interface.

33. **True** or False: By default all members of an interface are public

Algorithm Workbench

7.

```
3   public class Sterio extends SoundSystem implements CDplayable, TunerPlayable, CassettePlayable {
4
5   }
```

8.

```
3   public interface Nameable {
4
5       public void setName(String n);
6       public String getName();
7
8   }
```

9.

```
3   public class Half implements Computable {
4
5       Computable compute = (x) -> x/2;
6
7       @Override
8       public double compute(double x) {
9           return compute(x);
10      }
11
12  }
```