Peer Instruction 5
Which of the following statements about Java classes is incorrect?

A. Classes are templates for creating objects.
B. Classes can contain methods and data, but not imports.
C. Classes cannot be instantiated from other classes.
D. Classes and objects are the same thing.
E. Multiple objects can be instantiated from a single class.
From which of the following locations can you instantiate a Java class?

A. From a method in another class
B. From a method within the same class
C. As an instance variable in another class
D. As an instance variable in the same class
E. All of the above, and more besides!
Which of the following statements about objects and classes are correct?

1) In Java, methods and instance members can only exist inside a class.
2) Instantiation does not require memory allocation.
3) Instantiation makes a class from an object.
4) Many objects can be made from a single class.
5) Only a single object can be made from a class.

A. 1) and 3)
B. 1) and 4)
C. 2) and 3)
D. 2) and 4)
E. 1) and 5)
Which of the following statements about static and non-static are correct?

A. Only one copy of instance (non-static) members exists for all objects of a class.
B. There is a separate copy of instance data for every object that is instantiated.
C. Static data cannot be accessed using the name of a class.
D. Accessing instance data does not require use of the class name, if done from within the same class.
What are the size of the ArrayList after the following code executes?

```java
ArrayList<String> list = new ArrayList<>(10);
list.add("Java");
list.add("Basic");
list.add("C++");
list.add(2, "Python");
list.add(3, "Fortran");
list.remove("Java");
```

**size, capacity:**

- **A.** 4, 4
- **B.** 4, 10
- **C.** 10, 4
- **D.** 10, 10
What is the contents of the `ArrayList` after the following code executes?

```java
ArrayList<String> list = new ArrayList<>();
list.add("Java");
list.add("Basic");
list.add("C++");
list.add(2, "Python");
list.add(3, "Fortran");
list.remove(1);
```

A. [Java, Basic, Python, Fortran, C++]
B. [Java, Python, C++, Fortran]
C. [Basic, Python, Fortran, C++]
D. [Java, Python, Fortran, C++].
Select the statement that best describes the attributes of an ArrayList.

A. An ArrayList can grow or shrink dynamically without any intervention from the programmer.

B. An Array can grow or shrink dynamically without any limitations or special action by the programmer.

C. An ArrayList can grow or shrink dynamically, but an element can only be added at the beginning or end.

D. An ArrayList cannot grow or shrink dynamically, it must be defined by the programmer.