Lecture 5 Clicker Questions

1) Which line of this program is incorrect?

A. `public interface Colorable {
   public Color getColor();
}

B. `return Color.WHITE;`

C. `public class Rectangle implements Colorable {
   //constructor elided
   D. `@Override
   public Color getColor() {
      E. `return Color.PURPLE;
   }
}

Answer: B. The interface is just a contract. It tells implementing classes what methods to define - not how to define them.

2) Given the following interface:

   `public interface Clickable {
      public void click();
   }

Which of the following would work as an implementation of the `Clickable` interface? (don't worry about what `changeXPosition()` does)

| A | @Override
public void click() {
   this.changeXPosition(100.0);
}
|---|---
| B | @Override
public void click(double xPosition) {
   this.changeXPosition(xPosition);
}
| C | @Override
public void clickIt() {
   this.changeXPosition(100.0);
}
| D | @Override
public double click() {
   return this.changeXPosition(100.0);
}
3) Given the following class:

Given that `typeable` has declared the `type()` method and `clickable` has declared the `click()` method, which of the following calls is valid?

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A</td>
<td>Typeable macBook= new Typeable(); macBook.type();</td>
</tr>
<tr>
<td>B</td>
<td>Clickable macBook = new Clickable(); macBook.type();</td>
</tr>
<tr>
<td>C</td>
<td>Typable macBook= new Laptop(); macBook.click();</td>
</tr>
<tr>
<td>D</td>
<td>Clickable macBook = new Laptop(); macBook.click();</td>
</tr>
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Answer: D. You can't instantiate an instance interface - you must instantiate an instance of a class that implements that interface. This would eliminate A and B. D is the only option that calls a method defined by the declared type.