Reading Quiz 2 Solutions

Answer these questions from the reading in Java Foundations (LDC) Chapters 5 and 7. Attempt everything even if you are unsure of the proper syntax.

1. Put a comment next to each of the following lines of code indicating when it refers to an instance of an object or a static object.

```java
//Coffee is the class, method calls in format Coffee.x() are static, cappuccino is an instance of the Coffee class. The call to the Coffee Constructor returns a Coffee instance, and method calls in format cappuccino.x() are also instance
Coffee cappuccino = new Coffee(); //INSTANCE
Coffee.setTemp("Scalding"); //STATIC
int numberCoffeesOrdered = Coffee.getNumOrders(); //STATIC
cappuccino.drink(); //INSTANCE
```

2. Suppose we have declared an int array called power, of size 5, and initialized it to hold the power of two corresponding to the index of each element (i.e. \(2^{\text{index}}\)). In other words, element 3 holds the value of 8 (because \(8 = 2^3\)). Draw the array, label each element with its index and contents.

```
<table>
<thead>
<tr>
<th>index</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>value</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>
```