Quiz 5 Solution

Below is one solution. Note that there are only two instance variables (text and cost)
There are three constructors. Note that the append method calls the second version of the Message constructor.

Solution and Key (20 pts)

```
public class Message {
   private String text;
   private double cost;

   public Message() {
      text = "NOMESSAGE";
      cost = 1.0;
   }

   public Message(String textIn, double costIn) {
      text = new String(textIn);
      cost = costIn;
   }

   public Message(Message m) {
      text = new String(m.text);
      cost = m.cost;
   }

   public String toString() {
    return "Text: " + text + " Cost: " + cost;
   }

   public boolean equals(Message m) {
      if (text.equals(m.text))
         return true;
      return false;
   }

   public static Message append(Message m1,
                                Message m2) {
      return new Message(m1.text + m2.text,
                         m1.cost + m2.cost);
   }
}
```