1. (2 pts) In order to center text on a Container, we obtain a reference to a ____________ object associated with a Graphics object, and then use the method ____________ to determine how much horizontal space a String will take up.

2. (2 pts) Suppose we have a reference called button to a JButton object. Suppose the label on the JButton is a number. How can we in one line change the number on the button to its remainder when the number is divided by 50?

3. (2 pts) If a class definition implements the ActionListener interface, it must implement the method ________________. What benefit does the class definition get from doing this?

4. (2 pts) In order to detect changes to JCheckBoxes, JRadioButtons, and JComboBoxes, we implement the ________________ interface which contains the method ________________.

5. (2 pts) Filling in the appropriate method name where the ellipses are so that the class definition will compile without error, can you determine whether an even or an odd number will be printed when the button is clicked? Explain your answer.

```java
import java.awt.*;
import javax.swing.*;
import java.awt.event.*;

public class Question5 extends JFrame implements ActionListener {
    private JButton button;
    public Question5(String title) {
        super(title);
       .setLayout(new FlowLayout());
        button = new JButton("Press Me");
        add(button);
    }
    public void ...(ActionEvent e) {
        int number = (int)(100*Math.random());
        System.out.println(number);
    }
    public static void main(String[] args) {
        Question5 question5 = new Question5("Question 5");
        question5.setSize(400,400);
        question5.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        question5.setLocationRelativeTo(null);
        question5.setVisible(true);
    }
```