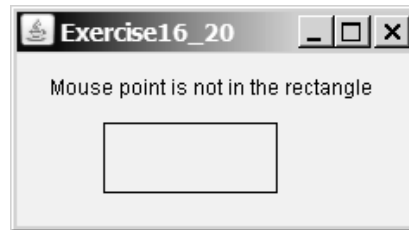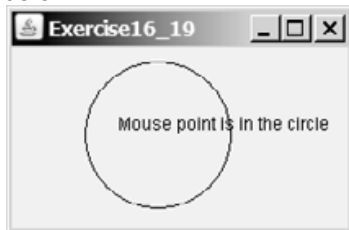1. Write a program that draws a fixed circle, rectangle and triangle. Whenever a mouse is moved, display the message indicating whether the mouse point is inside the figure, as shown in figures below.
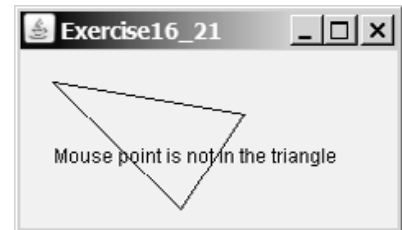
2. Write a program that displays a circle. You can point the mouse inside the circle and drag (i.e.,move with mouse pressed) the circle wherever the mouse goes, as shown in Figure below.
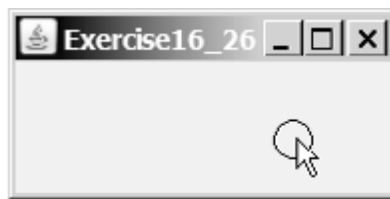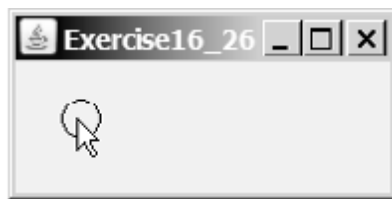
3. Write a program that displays head (**H**) or tail (**T**) for each of nine coins, as shown in Figure below. When a cell is clicked, the coin is flipped. A cell is a **JLable**. Write a custom cell class that extends **JLable** with the mouse listener for handling the clicks. When the program starts, all cells initially display **H**.

Event Class (Handlers)	Listener Interface	Listener Methods
ActionEvent	ActionListener	actionPerformed(ActionEvent)
ItemEvent	ItemListener	itemStateChanged(ItemEvent)
MouseEvent	MouseListener	mousePressed(MouseEvent)
		mouseReleased(MouseEvent)
		mouseEntered(MouseEvent)
		mouseExited(MouseEvent)
		mouseClicked(MouseEvent)
	MouseMotionListener	mouseDragged(MouseEvent)
		mouseMoved(MouseEvent)
KeyEvent	KeyListener	keyPressed(KeyEvent)
		keyReleased(KeyEvent)
		keyTyped(KeyEvent)
WindowEvent	WindowListener	windowClosing(WindowEvent)
		windowOpened(WindowEvent)
		windowIconified(WindowEvent)
		windowDeiconified(WindowEvent)
		windowClosed(WindowEvent)
		windowActivated(WindowEvent)
		windowDeactivated(WindowEvent)
ContainerEvent	ContainerListener	componentAdded(ContainerEvent)
		componentRemoved(ContainerEvent)
ComponentEvent	ComponentListener	componentMoved(ComponentEvent)
		componentHidden(ComponentEvent)
		componentResized(ComponentEvent)
		componentShown(ComponentEvent)
FocusEvent	FocusListener	focusGained(FocusEvent)
		focusLost(FocusEvent)
AdjustmentEvent	AdjustmentListener	adjustmentValueChanged(AdjustmentEvent)
ChangeEvent	ChangeListener	stateChanged(ChangeEvent)
ListSelectionEvent	ListSelectionListener	valueChanged(ListSelectionEvent)