**GUI14 CoordinatePlane**

**Directions**

Create a GUI program that draws a coordinate plane with dimensions 400 x 400. Each grid line should be 10 pixels apart. Color the x and y axes red and label them.

Use two for loops in your implementation.

You will need to use the following Graphics class methods:  
- **setColor**(Color c)  
- **drawLine**(int x1, int y1, int x2, int y2)  
- **drawString**(String str, int x1, int x2)

To increase the line thickness insert the following code into the paint method before you draw the axes.

Graphics2D g2d = (Graphics2D)page; // page is the Graphics object

int width = 5;

g2d.setStroke(new BasicStroke(width));

Copy the following code into your source file.

import java.util.\*;

import java.awt.\*;

import javax.swing.\*;

import java.awt.event.\*;

public class GUI14 extends JFrame

{

// constructor

public GUI14()

{

// set frame attributes

setLayout(null);

setSize(500, 500);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

getContentPane().setBackground(Color.white);

setVisible(true);

}

public void paint(Graphics page)

{

super.paint(page); // erase background

}

// main method

public static void main(String[] args)

{

GUI14 app = new GUI14(); // run program

}

}

**Source File**

GUI14.java

**Sample Run**

