

Question X: Graphics in Java

For the following questions, assume the Java2D graphics primitives:

Arc2D.Float (x, y, width, height, start, extent, type)

Ellipse2D.Float (x, y, width, height)

Line2D.Float (x1, y1, x2, y2)

Rectangle2D.Float (x, y, width, height)

RoundRectangle2D.Float (x, y, width, height, arcwidth, archeight)

1. Draw the figure that results from the following sequence of drawing statements in Java2D. [6]

```
canvas.draw (new Line2D.Float (0, 0, 15, 50));  
canvas.draw (new Line2D.Float (15, 50, 30, 0));  
canvas.draw (new Ellipse2D.Float (35, 0, 30, 50));  
canvas.draw (new Line2D.Float (70, 0, 85, 50));  
canvas.draw (new Line2D.Float (85, 50, 100, 0));  
canvas.draw (new Line2D.Float (100, 0, 115, 50));  
canvas.draw (new Line2D.Float (115, 50, 130, 0));
```

2. What do the **translate** and **scale** methods in the Graphics2D API do? [2]