# WORKSHEET 2.1

# Objects and Classes

The following object declarations and initializations will be used for all questions. This code will create a DrawingTool object called *marker* and a SketchPad object called *poster*. The *poster* will have dimensions of 600 x 600, and the *marker* will be constructed to be used on the *poster.* Each drawing will begin at the center of the poster at the point (0,0).

DrawingTool marker;

SketchPad poster;

poster = **new** SketchPad(600,600);

marker = **new** DrawingTool(poster);

1. On a piece of paper, draw the figure generated by the following code segment:

marker.drawCircle(50);

marker.drawString("Small");

marker.up();

marker.move(0,120);

marker.down();

marker.drawCircle(70);

marker.drawString("Big");

2. Enhance # 1 by writing code to draw a third circle labeled “Middle” that connects the centers of circles “Small” and “Big.”

3. Enhance # 1 by writing code to draw three circles, each tangent to “Big.” The first should be drawn to the immediate left of “Big” with a radius of 30 units and labeled “Left.” The second should be drawn directly above “Big” with a radius of 40 units and labeled “Above.” The third should be drawn to the immediate right of “Big” with a radius of 50 units and labeled “Right.”