

## WORKSHEET A4.1

### Sphere

1. Now that you have designed several classes dealing with simple shapes, it is time to try one that is a little more complex, the sphere. You may need to do some research to come up with all the formulas that would be needed to represent a sphere. First, try to write down all the variables, methods, and constructors that you will need to represent a Sphere class. Get as detailed as you can so you don't have to change or add anything later. Getting a good design down on paper before you start writing code is very helpful for complex programs.

Variables:

Constructors:

Methods:

2. The draw() method for a sphere is particularly tricky. Come up with some ways that you might represent the three-dimensional figure of a sphere with a two-dimensional tool.