## **Assessment Instructions**

Instructions: For this assessment, you will need to use the Circle, Cylinder, Oval, and

OvalCylinder classes used in lesson 2.

- 1. Be sure that you downloaded the Circle.java, Cylinder.java, Oval.java, and OvalCylinder.java files to your Polymorphism projects folder.
- 2. To avoid confusion, rename these classes as Circle2, Cylinder2, Oval2, and
- 1. OvalCylinder2 before proceeding any further.
- 2. Create a class called TestPoly2.
- 3. Create a method in TestPoly2 that will accept an object of any one of those classes as input and then output the result of calling the getCenter() method that they all have in common. Call this method showCenter(). Make sure that you identify the object's reference as part of the output of showCenter(). For example, in the sample output shown below, Circle@1573a4a refers to a memory location for the object.
- 4. Create a main() method that tests the showCenter() method on objects of each
- 5. class type. Use an ArrayList of objects of the different classes and a for loop to run through calls to showCenter().
- 6. Save the program as TestPoly2.java.

Expected output from running main() should be:

```
Options

For Circle@157ea4a center is at (2,4)

For Cylinder@d6b059 center is at (10,15)

For Oval@d3c65d center is at (25,10)

For OvalCylinder@1843a75 center is at (40,10)
```