Copy the file Oblong.java from blackboard. Open the file and compile it. Ensure that you save the following exercises in the same directory as Oblong.java

1. Write a program called `OblongTester.java` which instantiates (creates) a new Oblong object. Use appropriate methods to set its height to 10 and 25. Use appropriate methods to access the values of each instance variable, and output them to screen.

2. Write a program which instantiates a new Oblong object. Use appropriate methods to set its instance variables to values entered by the user. Use an appropriate method to find the area of the Oblong and output it to screen.

```
Enter the height: 10
Enter the width: 5
Area: 50.0
```

3. Write a program which instantiates two separate Oblong objects. Use appropriate methods to set their instance variables to values entered by the user. Your program should then print out details of the Oblong which has the largest area.

```
The largest area is the Oblong with:
Width 5.0 and Height 7.0
```

4. Add a new method called **`calculatePerimeter( )`** to the `Oblong` class. Modify the program created in Question 2 above so that it prints out the perimeter of your Oblong.

5. Add a method called **`isSquare( )`** to the Oblong class. The method should return a `boolean` value stating whether or not an Oblong is a perfect square. Write a program which instantiates a new Oblong object, and prints an appropriate message if that Oblong is a square.

6. Add a new method to the Oblong class that will increase the height and length values of an Oblong by amounts entered by the user. Write a program to test your method.

7. Add a new method that will find the length of the diagonal of an Oblong object. Write a new program to test your new method.

   The Math.sqrt( ) method will find the square root of a particular number. For example, the statement **`Math.sqrt(25)`** *will return 5.*