Assignment 2

To Be Handed in by Tuesday October 8

- a printed copy of all code
- use NetBeans to print out the java code with line numbers

To Be Submitted by Sunday October 6

- a zipped copy of your NetBeans project by Sunday September 30
    - use File > Export Project > To ZIP
    - the name of this file should be yourName_a2.zip

To Be Demonstrated

- must demonstrate the program to me
- it will not be marked until you have demonstrated the program to me
- if you are unable to explain the code, your mark is ZERO
- if you do not show me a running version of the program, your mark is ZERO

Remember

- this is to be an individual effort
    - do not work with anybody to complete the assignment
- a mark of zero will be given to "group efforts"
- use NetBeans to print out a copy of the code
    - with line numbers
    - do not use line wrap
- at the beginning of class hand in the printed code
    - assignments not handed in at the beginning of class will be considered late
    - one mark will be deducted for each day that the assignment is late
    - at the end of the class show me a running version of the program

Note:

- up to 40% of the mark will be based on the appearance and ease of use of the program
- the program ends with
    - the appropriate calculation
    - or an error message if the user enters a negative number
    - your name and student number should always appear as the last line of output

Basic Code Requirements

- the first lines of your code should contain (not in main method)

```
/**
Your Name
Your Student Number
Assignment 2
Date
*/
```

- create a project called TheShape that
  - prompts the user to type in a
    - 1 for a Triangle calculation
    - 2 for a Rectangle calculation
    - 3 for a Circle calculation
    - any other number ends the program without any calculation

- Triangle Calculations
  - prompt user for height and base
  - print out Triangle area
  - formula is: area = .5 * height * base

- Rectangle Calculations
  - prompt user for width and length
  - print out the Rectangle's area and perimeter
  - formulas
    - area = length * width
    - perimeter = 2 * (length + width)

- Circle Calculations
  - prompt user for the radius
  - print out the Circle's diameter
  - formula is: diameter = 2 X radius

- at some point in the program
  - you must use the conditional operator at least once

Note:

- if user types in a negative number then
  - inform the user that negative numbers not allowed
  - the program then should not prompt for more input
  - the program should not print out any calculations
- do not use System.exit or break to end the program
- use comments to help explain your code
- use variable names that help to explain your code