LAB 02 (MATH IS EASY) MANUAL

<u>Description</u>

In this lab, you are going to write three simple Java programs to solve three mathematical problems. This lab will help you to practice using variables, writing arithmetic expressions and using input methods from the course library.

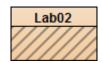
Lab Template

You can download the zipped BlueJ Project for this lab by clicking here.

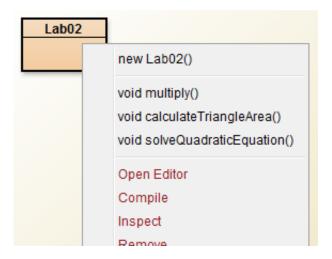
Instructions on BlueJ Project

Please refer to the following steps for running the programs in this lab.

- 1. Download and unzip the BlueJ Project for this lab.
- 2. Open the project in BlueJ.
- 3. You will find an icon named **Lab02** as indicated below.



- 4. Double click on the icon to open up the code editor.
- 5. Follow the instructions on the next three task pages to write the Java code in the correct area of the class **Lab02** in BlueJ.
- 5. If you wish to test your program for a specific task, compile the program and right click on the **Lab02** icon. You will see a a list of items as indicated below.



- To run task 1, click on void multiply(). To run task 2, click on calculateTriangleArea(). To run task 3, click on solveQuadraticEquation().
- 3. You will use the terminal window for inputting and outputting in this lab. If the terminal window does not show up when running the program, you can open it by clicking **View** -> **Show Terminal** in BlueJ.

Using the Math library

The Math library in Java provides a lot of useful methods for arithmetic computation. For example, when finding the square root of a number, we can use the methodMath.sqrt(). The method Math.sqrt(d) returns the positive square root (the number d as a **double**. For example, Math.sqrt(4) will return a value of 2.0.

For other methods provided by the Math library in Java, you can click here.

Solution

The solution to this lab will be available **after the deadline**. You can then view the solution by clicking the **Show Answer** button in each of the task pages.