## Welcome to the Quadratic Equation Solver User Manual!

Thank you for purchasing or downloading our product from the KB Technologies. This new software is here to assist you because "Math isn't a problem anymore".

## **Copyright and License**

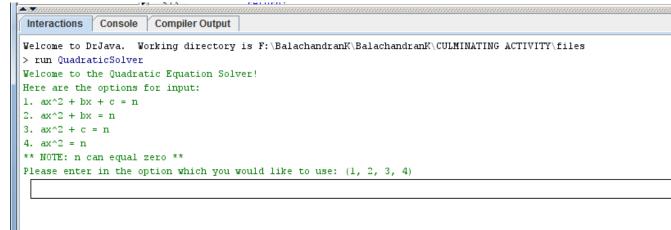
There are no warranties for this utility program and the products and services are available to everyone. We assume no responsibility for any mishap as the code is given in perfect condition. It is copyrighted 2011 and is recommended for any student who has minimum knowledge in the Grade 10 Ontario curriculum based Academic Mathematics course.

## How to use the program:

- 1. Please download the *parabola.java* and the *QuadraticSolver.java* file and save them under the same folder.
- 2. You may open them with software such as DrJava or JGrasp which you may need to install.
- 3. Click compile on the top hand toolbar in the parabola. java and you should see at the bottom of the screen

	Interactions Console Compiler Output
	Compilation completed.
l	
l	
l	

4. Click the run button at the top of the toolbar. An applet with a gray screen appears. Minimize the applet screen. Scroll the Interactions Pane up to the maximum point. It should like this.



5. Bring your cursor to the first input box and click in the box. Enter in your option (1, 2, 3, 4).

6. Based on your option, a request will be made to enter in the equation.

```
Interactions
Console
Compiler Output

Welcome to DrJava.
Working directory is F:\BalachandranK\BalachandranK\CULMINATING ACTIVITY\files

> run QuadraticSolver

Welcome to the Quadratic Equation Solver!

Here are the options for input:

1. ax^2 + bx + c = n

2. ax^2 + bx = n

3. ax^2 + c = n

4. ax^2 = n

** NOTE: n can equal zero **

Please enter in the option which you would like to use: (1, 2, 3, 4)

1

Enter the quadratic equation separated by spaces like such (ax^2 + bx + c = n):
```

For example, if your option was 1, this would be your request statement.

- 7. Enter in the equation in standard form with spaces and the x- variable in lower case.
- 8. Based on your input, it will output VALID or INVALID. If it was valid, you will receive the direction of opening, the discriminant, x-intercepts (roots), and y-intercept. Your roots will contain as many decimal places as possible as the user may choose how many decimal places to round to.
- 9. You may now open the applet that you minimized earlier and a graph of the parabola should be seen with the equation written in standard form with its two roots mentioned as well. Stretch the screen out to see the equation and the roots.
- 10. If it was INVALID, compile the *parabola.java* file again, click run and try once more. Remember, if the format of the input was incorrect, you will not get your results.

Hope this helps your use with the quadratic equation solver.