

# Multiple representations for the solving of the quadratic equation.

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Select one of the three icons shown, RUN, GRAPH or TABLE mode from the main menu by using the arrow keys to highlight the icon required.



Icon # 5

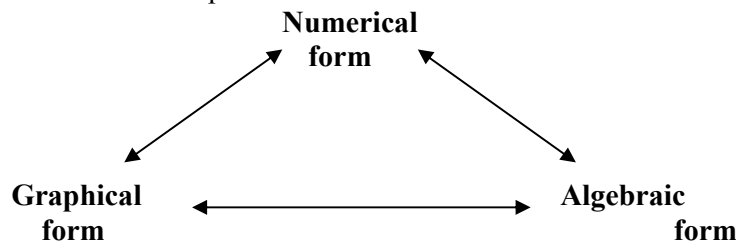


Icon # 7 or



Icon A for quick entry.

This worksheet is to help show the links between the three forms of mathematics.



Do it numerically, view it graphically,  
 Do it numerically, view it algebraically,  
 Do it graphically, view it algebraically,  
 Do it algebraically, view it graphically,  
 Do it algebraically, view it numerically.

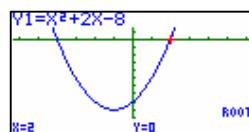
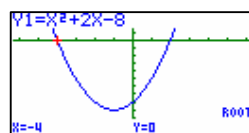
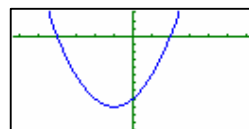
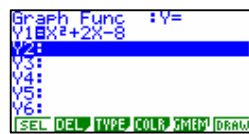
The quadratic equation is a mathematical expression of the form  $ax^2 + bx + c = 0$ .

**Example:** Find the solution to the equation  $y = x^2 + 2x - 8 = 0$

**Answer:** Select the icon you want to work in.

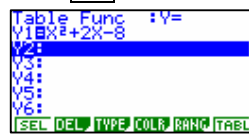
### Graph

Type in the equation, **F6** then **SHIFT F5** now F1 for the solutions



### Table

Type in the equation, **F5** for the RANGE setup, then **F6**



X	Y1	Y1
-6	16	-10
-5	7	-8
-4	0	-6
-3	-5	-4

X	Y1	Y1
0	-8	2
1	-5	4
2	0	6
3	7	8

### Equation

**F2** then **F1**, enter in the coefficients, then **F1** to solve.

