

QUADFORM Program Instructions

We'll practice using the QUADFORM program by using it to solve $3x^2 + 6x - 5 = 0$.

Remember the quadratic formula only works if you have zero on one side of the equation. Notice, since the general form of a quadratic function is $ax^2 + bx + c = 0$, so for our equation we have $a = 3$, $b = 6$, and $c = -5$.

1. Open the program by pressing the **PRGM** button. It is located three buttons down from the top in the middle row.

On the **TI82** and **83**, you want to execute a program so select **EXEC** at the top and arrow down to **QUADFORM**. Press **ENTER** when you have **QUADFORM** highlighted. It will put "**prgmQUADFORM**" on the home screen. You need to press **ENTER** to tell it you want to run the program.

On the **TI85** or **86**, select **NAMES** by pressing **F1**. Then select **QUADF**. It will put "**QUADFORM**" on the home screen. Press **ENTER** to tell it you want to run the program.

It will prompt you to enter a , b , and c . Press **ENTER** after each entry. It will do its calculations and spit out the value of the discriminant and the two solutions to the equation. Round the solutions to two decimal places and write them down. (If there happens to be just one solution to an equation, the solution will appear twice.)

Did you get .63 and -2.63 as the two solutions? (Notice the discriminant is positive which means there will be two solutions.)

After the program finishes it will say **Done**. If you want to solve another such equation, press **ENTER** and it will rerun the program. If you do not want this, press **CLEAR**. If the program starts inadvertently and you want out of it, simply **QUIT** by pressing **2nd** and then the **MODE** key on the **TI83** or **82**. On the **TI85** or **86**, the **QUIT** is the second function of the **EXIT** key.