

Secondary 2  
lesson 5.5

## Solve Quadratics with a calculator

### Objective:

Understand and properly use the calculator menus  
Know what a zero is and how to find it  
Use the calculator window correctly  
Navigate the graph correctly to find solutions

### Factor and solve:

Example 1)  $17x^2 - 2x - 31 = 0$

Step 1: factor

Step 2: umm, I don't think so

Step 3: *get out your calculator*

Graph each on your calculator and find the zero's.

1.  $x^2 + 12x + 36 = 0$

2.  $x^2 - 17x + 66 = 0$

3.  $x^2 - 5x - 14 = 0$

Before you can solve you must set the equation equal to zero!!

Example 2)  $x^2 + 25 = -10x$

Step 1:

Step 2:

x=

Graph each on your calculator to find the zero's.

4.  $x^2 + 7x = 30$

5.  $2x^2 + 22x = 120$

6.  $x^2 - 64 = 0$

Graph each on your calculator to find the zero's.

7.  $4x^2 - 25 = 0$

8.  $(3x - 7)(2x - 9) = 0$

9.  $(x + 6)(x - 4) = 0$

Graph each on your calculator to find the zero's.

10.  $4x^3 + 22x^2 = 0$

11.  $x^3 + 7x^2 - 9x - 63 = 0$

13.  $x^2 + 25 = 0$