

<u><i>Function</i></u>	<u><i>Solutions</i></u>	<u><i>Graph Sketch</i></u>	<u><i>Value of $b^2 - 4ac$</i></u>
$Y = 3x^2 + 10x - 25$			
$x^2 - 10x + 34 = 0$			
$F(x) = 2x^2 - 3x - 6$			
$-x^2 + 6x - 8 = 0$			
$F(x) = 4x^2 - 12x + 9$			

The value of $b^2 - 4ac$ is called the _____.

If it's value is :

- Positive, then the quadratic function has _____.
- Negative, then the quadratic function has _____.
- Zero, then the quadratic function has _____.

How many solutions do the following quadratic functions have?

1. $y = 2x^2 + 8x - 15$

2. $4x^2 - 28x + 49 = 0$

3. $F(x) = 6x^2 - 3x + 4$

4. $-3x^2 + 2x - 6 = 0$

5. $y = -x^2 + 7x - 9$