

### Quadratic Function Calculator

Name: \_\_\_\_\_ Class: S. 4 \_\_\_\_\_ ( ) Date: \_\_\_\_\_

#### Task 1

In the applet, you can change the coefficient of  $x^2$ , coefficient of  $x$  and the constant term.

Also, you can substitute different values of  $x$  to find the corresponding value of  $y$ .

	Function	Points on function	Graph																
1.	$y = x^2 + 2x - 3$	<table border="1"> <thead> <tr> <th><math>x</math></th> <th><math>y</math></th> </tr> </thead> <tbody> <tr><td>-4</td><td>5</td></tr> <tr><td>-3</td><td>0</td></tr> <tr><td>-2</td><td>-3</td></tr> <tr><td>-1</td><td>-4</td></tr> <tr><td>0</td><td></td></tr> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> </tbody> </table>	$x$	$y$	-4	5	-3	0	-2	-3	-1	-4	0		1		2		
$x$	$y$																		
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2.	$y = x^2 - 4x - 2$	<table border="1"> <thead> <tr> <th><math>x</math></th> <th><math>y</math></th> </tr> </thead> <tbody> <tr><td>-1</td><td>3</td></tr> <tr><td>0</td><td>-2</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>2</td><td>-6</td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> </tbody> </table>	$x$	$y$	-1	3	0	-2	1	-5	2	-6	3		4		5		
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8.	$y = -2x^2 + 6$	<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-2</td> <td>-2</td> </tr> <tr> <td>-1</td> <td>4</td> </tr> <tr> <td>0</td> <td></td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> </tbody> </table>	x	y	-2	-2	-1	4	0		1		2						
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9.	$y = -2x^2 + 8x - 8$	<table border="1"><thead><tr><th>x</th><th>y</th></tr></thead><tbody><tr><td>0</td><td>-8</td></tr><tr><td>1</td><td></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td></td></tr><tr><td>4</td><td></td></tr></tbody></table>	x	y	0	-8	1		2		3		4						
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