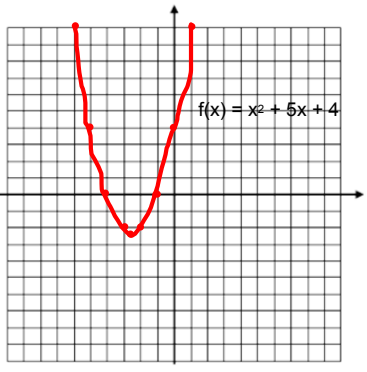
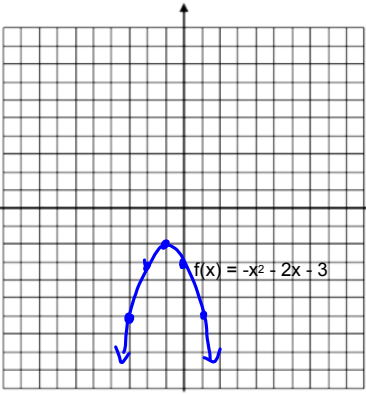


Do Now

Take out Packet from yesterday - Complete graph # 3 & 4

Apr 11-8:46 AM

<p>4)</p> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20px;">x</th> <th style="width: 20px;">y</th> </tr> </thead> <tbody> <tr><td>-6</td><td>10</td></tr> <tr><td>-5</td><td>4</td></tr> <tr><td>-4</td><td>0</td></tr> <tr><td>-3</td><td>-2</td></tr> <tr><td>-2</td><td>-2</td></tr> <tr><td>-1</td><td>0</td></tr> <tr><td>0</td><td>4</td></tr> <tr><td>1</td><td>10</td></tr> </tbody> </table>  <p style="margin-left: 40px;">$f(x) = x^2 + 5x + 4$</p> <p style="margin-left: 40px;">AOS $x = -2.5$</p> <p style="margin-left: 40px;">Vertex $(-2.5, -2.25)$</p> <p style="margin-left: 40px;">Zeros $x = -4 \text{ \& } -1$</p>	x	y	-6	10	-5	4	-4	0	-3	-2	-2	-2	-1	0	0	4	1	10	<p>3)</p> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20px;">x</th> <th style="width: 20px;">y</th> </tr> </thead> <tbody> <tr><td>-3</td><td>-6</td></tr> <tr><td>-2</td><td>-3</td></tr> <tr><td>-1</td><td>-2</td></tr> <tr><td>0</td><td>-3</td></tr> <tr><td>1</td><td>-6</td></tr> </tbody> </table>  <p style="margin-left: 40px;">$f(x) = -x^2 - 2x - 3$</p> <p style="margin-left: 40px;">AOS $x = -1$</p> <p style="margin-left: 40px;">Vertex $(-1, -2)$</p> <p style="margin-left: 40px;">No Solution</p>	x	y	-3	-6	-2	-3	-1	-2	0	-3	1	-6
x	y																														
-6	10																														
-5	4																														
-4	0																														
-3	-2																														
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-1	0																														
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1	10																														
x	y																														
-3	-6																														
-2	-3																														
-1	-2																														
0	-3																														
1	-6																														

Apr 18-10:11 AM

Vertex Form of a Quadratic Function


$$f(x) = a(x - h)^2 + k$$

Vertex (h, k)

Axis of Symmetry $x = h$

a tells the direction the parabola opens

$a = \text{positive}$ $a = \text{negative}$



Apr 3-8:40 AM

Without graphing, state the vertex and the equation for the axis of symmetry for each of the following quadratic equations

1) $y = 2(x - 5)^2 + 3$

Vertex (5, 3)

$$y = a(x - h)^2 + k$$

ADS
 $x = 5$



2) $y = (x + 2)^2 - 7$

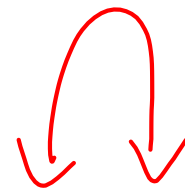
Vertex (-2, -7)

ADS
 $x = -2$

3) $y = -3(x + 4)^2$

Vertex (-4, 0)

ADS
 $x = -4$



Apr 3-9:01 AM