

NAME:

DATE:

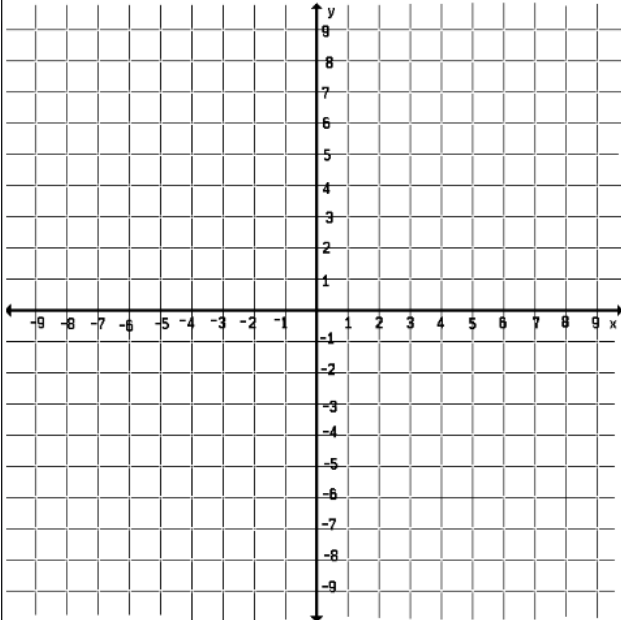
A2.Q2.BERMELLEEMBO: THE QUADRATIC FUNCTION'S GRAPH

**DAY G1
(GRAPHING AND ANALYSIS)**

NOTES

INTENTIONALLY BLANK

1. $f(x) = 2(x - 3)^2 - 8$ $a = \underline{\hspace{2cm}}$

Is the graph of $y = f(x)$ concave up or concave down? How do you know?															
Equation for Axis of Symmetry:	Coordinates of Vertex:														
Table of Values: <table border="1"><thead><tr><th>x</th><th>y</th></tr></thead><tbody><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table>	x	y													Graph. Label the axis of symmetry and vertex. 
x	y														
What are the zero(s) of the function?	Is the vertex a maximum or a minimum?														
State the Domain	State the Range														

2. $f(x) = -(x+5)^2 + 4$ $a = \underline{\hspace{2cm}}$

Is the graph of $y = f(x)$ concave up or concave down? How do you know?

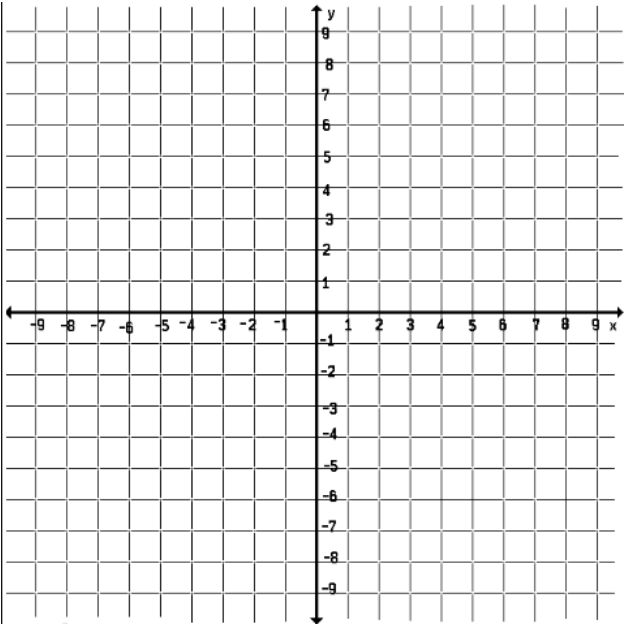
Equation for Axis of Symmetry:

Coordinates of Vertex:

Table of Values:

x	y

Graph. Label the axis of symmetry and vertex.



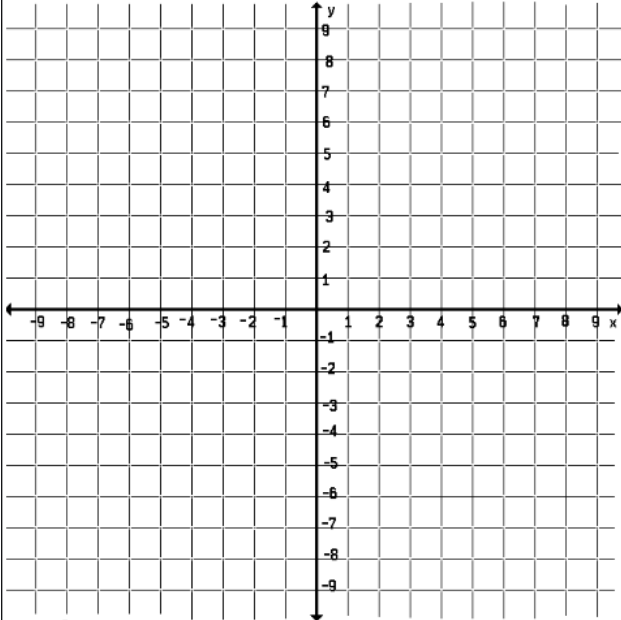
What are the zero(s) of the function?

Is the vertex a maximum or a minimum?

State the Domain

State the Range

3. $f(x) = 2x^2 + 12x + 16$ $a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$ $c = \underline{\hspace{2cm}}$

Is the graph of $y = f(x)$ concave up or concave down? How do you know?															
Equation for Axis of Symmetry:	Coordinates of Vertex:														
Table of Values: <table border="1"><thead><tr><th>x</th><th>y</th></tr></thead><tbody><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table>	x	y													Graph. Label the axis of symmetry and vertex. 
x	y														
What are the zero(s) of the function?	Is the vertex a maximum or a minimum?														
State the Domain	State the Range														

4. $f(x) = -3x^2 + 24x - 45$ $a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$ $c = \underline{\hspace{2cm}}$

Is the graph of $y = f(x)$ concave up or concave down? How do you know?

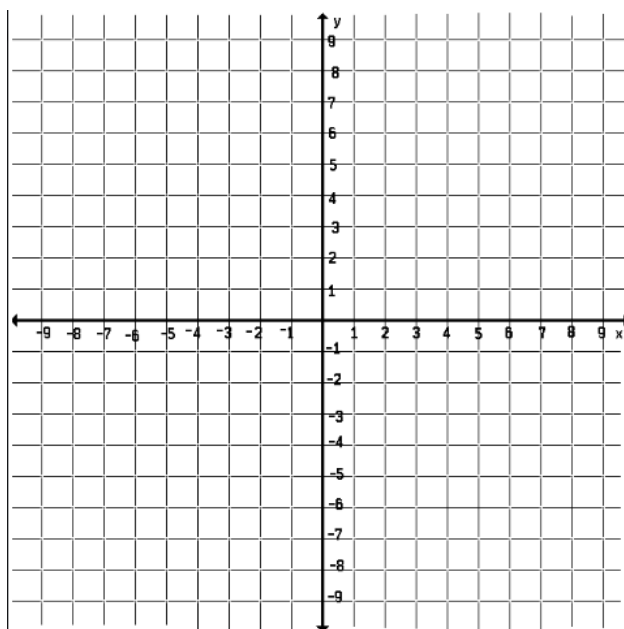
Equation for Axis of Symmetry:

Coordinates of Vertex:

Table of Values:

x	y

Graph. Label the axis of symmetry and vertex.



What are the zero(s) of the function?

Is the vertex a maximum or a minimum?

State the Domain

State the Range