



Name: \_\_\_\_\_

Date: \_\_\_\_\_ Per: \_\_\_\_\_

**Process**

- Solve
- Patiently Wait
- Pass Paper
- Check Work
- Coach / Praise
- Initial

Mathlete 1: \_\_\_\_\_ Mathlete 2: \_\_\_\_\_

Mathlete 3: \_\_\_\_\_ Mathlete 4: \_\_\_\_\_

Round: \_\_\_\_\_

<p><b>1. Write the function, below, &amp; graph in Desmos.</b></p> <p>Mathlete __: Check &amp; Initial: _____</p>	<p><b>2. Identify the y-intercept.</b></p> <p>Mathlete __: Check &amp; Initial: _____</p>
<p><b>3. Identify the x-intercept(s).</b></p> <p>Mathlete __: Check &amp; Initial: _____</p>	<p><b>4. Identify the zero(s).</b></p> <p>Mathlete __: Check &amp; Initial: _____</p>
<p><b>5. Identify the root(s).</b></p> <p>Mathlete __: Check &amp; Initial: _____</p>	<p><b>6. Absolute minimum or maximum?</b>        ___ N/A ___ Yes, Maximum ___ Yes, Minimum</p> <p>Coordinate: _____</p> <p>Mathlete __: Check &amp; Initial: _____</p>
<p><b>7. Is the graph symmetrical?</b></p> <p>___ No ___ Yes, and the Axis of Symmetry is x = _____</p> <p>Mathlete __: Check &amp; Initial: _____</p>	

<p><b>Round 1</b></p> <ol style="list-style-type: none"> <li><math>f(x) = x^2 + 6x + 1</math></li> <li><math>h(x) = x^2 - 4x + 2</math></li> <li><math>p(x) = x^2 + 2x - 5</math></li> <li><math>m(x) = x^2 - 10x - 4</math></li> </ol>	<p><b>Round 2</b></p> <ol style="list-style-type: none"> <li><math>f(x) = x^2 - 3x + 1</math></li> <li><math>h(x) = x^2 + 7x - 2</math></li> <li><math>p(x) = x^2 - 5x - 5</math></li> <li><math>m(x) = x^2 + x + 4</math></li> </ol>
<p><b>Round 3</b></p> <ol style="list-style-type: none"> <li><math>f(x) = -x^2 - 4x - 3</math></li> <li><math>h(x) = 2x^2 + 4x - 2</math></li> <li><math>p(x) = -x^2 + 6x - 7</math></li> <li><math>m(x) = -x^2 + 10x - 26</math></li> </ol>	<p><b>Round 4: Vertex Form</b></p> <ol style="list-style-type: none"> <li><math>m(x) = 3(x - 0.5)^2 - 6.75</math></li> <li><math>h(x) = -(x + 3.5)^2 + 6.25</math></li> <li><math>p(x) = -0.5(x + 1.5)^2 + 6.125</math></li> <li><math>f(x) = 2(x + 1.5)^2 - 12.5</math></li> </ol>

Round: \_\_\_\_\_

<b>1. Write the function, below, &amp; graph in Desmos.</b>  Mathlete __: Check & Initial: _____	<b>2. Identify the y-intercept.</b>  Mathlete __: Check & Initial: _____
<b>3. Identify the x-intercept(s).</b>  Mathlete __: Check & Initial: _____	<b>4. Identify the zero(s).</b>  Mathlete __: Check & Initial: _____
<b>5. Identify the root(s).</b>  Mathlete __: Check & Initial: _____	<b>6. Absolute minimum or maximum?</b> ____ N/A    ____ Yes, Maximum    ____ Yes, Minimum  Coordinate: _____  Mathlete __: Check & Initial: _____
<b>7. Is the graph symmetrical?</b>  ____ No    ____ Yes, and the Axis of Symmetry is $x =$ _____    Mathlete __: Check & Initial: _____	

Round: \_\_\_\_\_

<b>1. Write the function, below, &amp; graph in Desmos.</b>  Mathlete __: Check & Initial: _____	<b>2. Identify the y-intercept.</b>  Mathlete __: Check & Initial: _____
<b>3. Identify the x-intercept(s).</b>  Mathlete __: Check & Initial: _____	<b>4. Identify the zero(s).</b>  Mathlete __: Check & Initial: _____
<b>5. Identify the root(s).</b>  Mathlete __: Check & Initial: _____	<b>6. Absolute minimum or maximum?</b> ____ N/A    ____ Yes, Maximum    ____ Yes, Minimum  Coordinate: _____  Mathlete __: Check & Initial: _____
<b>7. Is the graph symmetrical?</b>  ____ No    ____ Yes, and the Axis of Symmetry is $x =$ _____    Mathlete __: Check & Initial: _____	