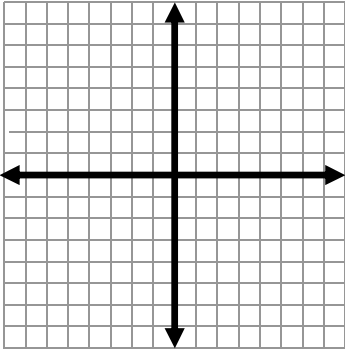
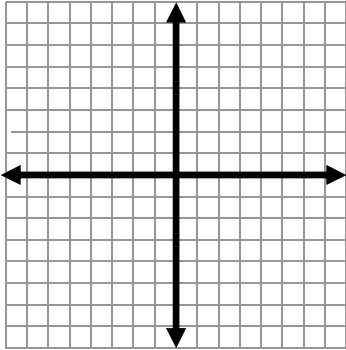
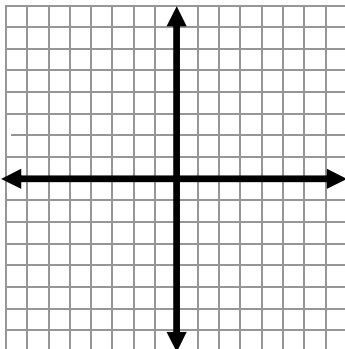
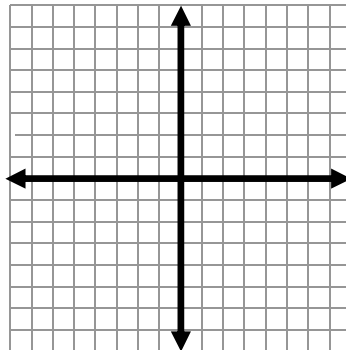
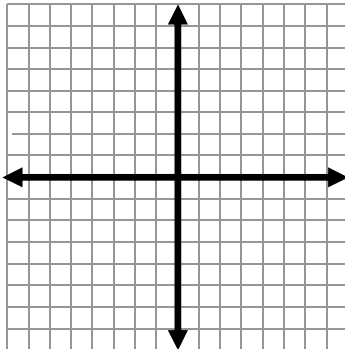
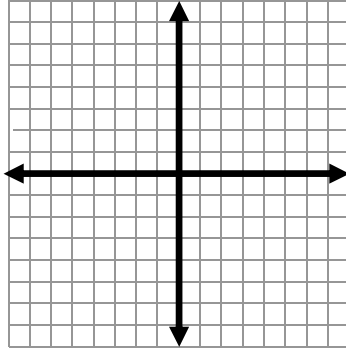
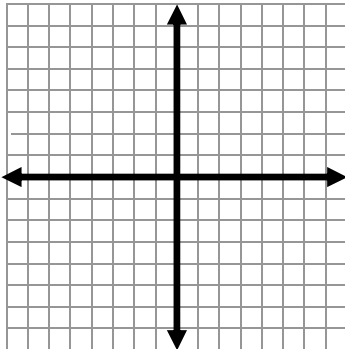


IM 3

7-1 Introduction to Exponential Functions

Name: _____ Per: _____ Date: _____

Go to www.desmos.com and graph the following. Then determine whether the function is growth or decay, find the y-intercept, and state the domain and range. Make sure your graphs are neat and explanations concise.

<p>1. Graph $y = 2^x$.</p> 	<p>2. Graph $y = 2^x - 5$. How is the graph translated from $y = 2^x$?</p> 
<p>3. Graph $y = 2^x + 3$. How is the graph translated from $y = 2^x$?</p> 	<p>4. Describe the translation of $y = b^x + k$ from the graph of $y = 2^x$.</p> 
<p>5. Graph $y = \left(\frac{1}{2}\right)^x$.</p> 	<p>6. Graph $y = \left(\frac{1}{2}\right)^x - 5$. How is the graph translated from $y = \left(\frac{1}{2}\right)^x$?</p> 
<p>7. Graph $y = \left(\frac{1}{2}\right)^x + 3$. How is the graph translated from $y = \left(\frac{1}{2}\right)^x$?</p> 	<p>8. Describe the translation of $y = b^x + k$ from the graph of $y = \left(\frac{1}{2}\right)^x$. Be specific.</p>