

Week 5 Online Learning

Week of April 27th covers Algebra Nation Section 7: Topics 3 – 4. Use the Algebra Nation workbook and practice book you already have for Days 1 and 2.

Day 1: Section 7 – Topic 3: Graphs of Exponential Functions – Part 1

Watch the video on Algebra Nation & Complete Workbook p. 182 – 185

Complete Practice Book p. 113 – 114 #1 – 7

Day 2: Section 7 – Topic 4: Graphs of Exponential Functions – Part 2

Watch the video on Algebra Nation & Complete Workbook p. 185 – 187

Complete Practice Book p. 114 – 115 #1 – 6

Day 3: Graphs of Exponential Functions Practice #1 – 2

Day 4: Graphs of Exponential Functions Practice #3 – 4

Day 5: Quiz covering Section 7 – Topics 3 & 4

***Directions:** Show ALL work; box/circle answer(s) unless there is a line for the answer.

Due: Friday, May 1st by 10pm on Focus

♥ Ms. Register

Website: www.MsRegister.weebly.com

Office Hours: 9:00am – 10:00am

Email: registere@leonschools.net

1:00pm – 2:00pm

Day 3 – Graphs of Exponential Functions Practice

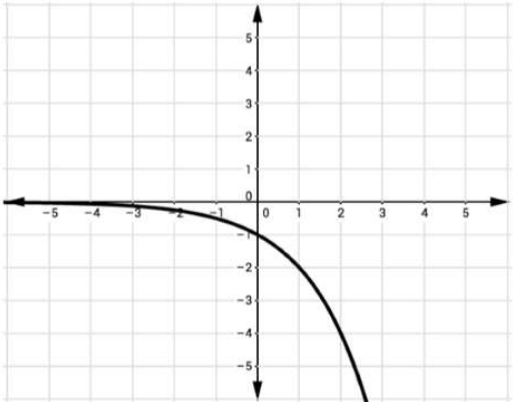
Directions: The question is in the center column. The tasks are on the left & right of the question.

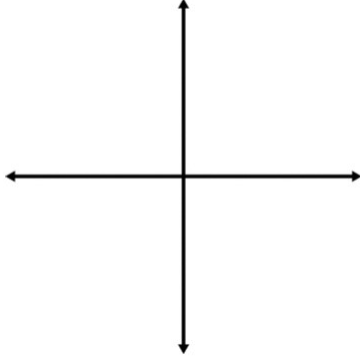
QUESTION 1												
<p>Complete the table. Then identify the y-intercept and the coordinate where $x = 1$.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> </tbody> </table>	x	y										<p>Describe the end behaviors of the graph.</p> <p>As x increases ($x \rightarrow \infty$), y _____.</p> <p>As x decreases ($x \rightarrow \infty$), y _____.</p>
x	y											

QUESTION 2														
<p>Find the common ratio and the y-intercept. Then write the exponential equation in standard form.</p> <p>$a =$ _____</p> <p>$b =$ _____</p> <p>$y =$ _____</p>	<table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">-2</td><td style="padding: 5px;">$-\frac{1}{9}$</td></tr> <tr><td style="padding: 5px;">-1</td><td style="padding: 5px;">$-\frac{1}{3}$</td></tr> <tr><td style="padding: 5px;">0</td><td style="padding: 5px;">-1</td></tr> <tr><td style="padding: 5px;">1</td><td style="padding: 5px;">-3</td></tr> <tr><td style="padding: 5px;">2</td><td style="padding: 5px;">-9</td></tr> </tbody> </table>	x	y	-2	$-\frac{1}{9}$	-1	$-\frac{1}{3}$	0	-1	1	-3	2	-9	<p>Sketch the graph of the exponential function.</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>As x increases ($x \rightarrow \infty$), y _____.</p> <p>As x decreases ($x \rightarrow \infty$), y _____.</p>
x	y													
-2	$-\frac{1}{9}$													
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1	-3													
2	-9													

Day 4 – Graphs of Exponential Functions Practice

Directions: The question is in the center column. The tasks are on the left & right of the question.

QUESTION 3												
<p>Find the common ratio and the y-intercept. Then write the exponential equation in standard form.</p> <p>$a =$ _____</p> <p>$b =$ _____</p> <p>$y =$ _____</p>		<p>Complete the table.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> <tr><td style="height: 20px;"> </td><td> </td></tr> </tbody> </table> <p>Describe the end behaviors.</p>	x	y								
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QUESTION 4																
<p>Complete the table. Then identify the y-intercept and the coordinate where $x = 1$.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">-2</td><td> </td></tr> <tr><td style="text-align: center;">-1</td><td> </td></tr> <tr><td style="text-align: center;">0</td><td> </td></tr> <tr><td style="text-align: center;">1</td><td> </td></tr> <tr><td style="text-align: center;">2</td><td> </td></tr> <tr><td style="text-align: center;">3</td><td> </td></tr> </tbody> </table>	x	y	-2		-1		0		1		2		3		<p>Consider the following exponential equation.</p> $y = 16(4^{x+1})$ <p>this is the same as</p> $y = 16 \cdot 4^{x+1}$	<p>Sketch the graph of the exponential function.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>As x increases ($x \rightarrow \infty$), y _____.</p> <p>As x decreases ($x \rightarrow -\infty$), y _____.</p>
x	y															
-2																
-1																
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