

Daily Agenda

Learning Target:
I can graph log and exponential functions.

Homework Worksheet	Assessments Mini Quiz - 1/27 Unit 7 Test - 2/1
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Believe you can and you're halfway there.
-Theodore Roosevelt

Nov 15-8:24 PM

Number Talk

12x14

Jan 24-10:51 AM

7.3 Graphs of Logs and Exponentials

Transformations

$y = a^{x-b} + c$

<p>Vertical Shift</p> <ul style="list-style-type: none"> • Down with base • Same direction <p>Reflect over x-axis</p> <ul style="list-style-type: none"> • Negative in front of base 	<p>Horizontal Shift</p> <ul style="list-style-type: none"> • In the exponent • Opposite direction <p>Reflect over y-axis</p> <ul style="list-style-type: none"> • x is negative • Make sure to factor out if horizontal shift
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Jan 25-8:06 AM

$f(x) = 2^{x-3} + 1$

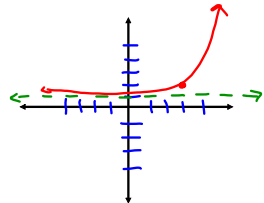
right 3, up 1

Domain $(-\infty, \infty)$

Range $(1, \infty)$

Asymptote $y = 1$

Crit. Pt. Intercept $(3, 2)$



Nov 8-8:46 AM

Transformations

$y = \log_a(x-b) + c$

<p>Vertical Shift</p> <ul style="list-style-type: none"> • Outside of argument • Same direction <p>Horizontal Shift</p> <ul style="list-style-type: none"> • In the argument • Opposite direction <p>Reflect over x-axis</p> <ul style="list-style-type: none"> • Negative in front of log • Base is between 0 and 1 	<p>Reflect over y-axis</p> <ul style="list-style-type: none"> • x is negative • Make sure to factor out if horizontal shift <p>Vertical Stretch/Compression</p> <ul style="list-style-type: none"> • Outside the log • Same • Multiplies y values by factor
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Jan 25-8:06 AM

$y = -\log_2(x-3) + 1$

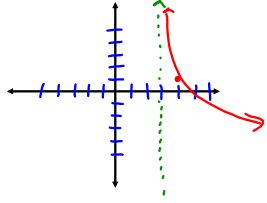
reflect over x, right 3, up 1

Domain $(3, \infty)$

Range $(-\infty, \infty)$

Asymptote $x = 3$

Critical Point $(4, 1)$



Nov 8-8:46 AM