**Graphing Exponential & Logarithmic Functions**

**~ Unit 12 Self-Pacing Guide ~**

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| Check When Complete | **Whole Class Lesson - L** | Thurs2/27 |
|  | Class Lesson – “The Exponential Family” |
| **Total/20** | **Tasks** | Poster Problems | Quick Notes | CYU #1 | CYU #2 |
|  | **Completed?** |  |  |  |  |
| Check When Complete | **Lesson 12.1 ~ Graphing Exponential Equations** | Fri2/28 |
|  | Watch video & take notes (CraycraftsMathCrew.com) |
|  | Independent Practice: “12.1 – Graphing Exponential Equations” (DeltaMath) |
|  | Mastery Check (In Class) |
| Check When Complete | **Whole Class Lesson - M** | Mon3/3 |
|  | Class Lesson – “Exponential Match-Up” |
| **Total/20** | **Tasks** | Poster Problems | Quick Notes | CYU #1 | CYU #2 | CYU #3  |
|  | **Completed?** |  |  |  |  | Skip #4! |
| Check When Complete | **Lesson 12.2 ~ Transformations of Exponential Functions** | Tues 3/4 – Wed 3/5 |
|  | Watch video & take notes (CraycraftsMathCrew.com) |
|  | Independent Practice: “12.2 – Transformations of Exponential Functions” (DeltaMath) |
|  | Mastery Check (In Class) |
| Check When Complete | **Whole Class Lesson - N** | Thurs3/6 |
|  | Class Lesson – “Graphs of Logs” |
| **Total/20** | **Tasks** | Poster Problems | Quick Notes | CYU #1a | CYU #1b |
|  | **Completed?** |  |  |  |  |
| Check When Complete | **Whole Class Lesson - O** | Fri3/7 |
|  | Class Lesson – “Lumberjack Graphs” |
| **Total/20** | **Tasks** | Poster Problems | Quick Notes | CYU #1  | CYU #2 | CYU #3  |
|  | **Completed?** |  |  |  |  |  |
| Check When Complete | **Lesson 12.3 ~ Graphing Logarithmic Functions** | Mon 3/10 |
|  | Watch video & take notes (CraycraftsMathCrew.com) |
|  | Independent Practice: “12.3 – Graphing Logarithmic Functions” (DeltaMath) |
|  | Mastery Check (In Class) |
| Check When Complete | **Unit Mastery Check** | Tues 3/11 – Thurs 3/13 |
|  | **Tues, 3/11:** Independent Practice (finishing Deltas & MathXL) & Catch-up on 12.1 – 12.3 Mastery Checks |
|  | **Wed, 3/12:** Graphing Exponentials & Logs – DFA 12 & work on Re-Focus (MathXL) |
|  | **Thurs, 3/13:** Graphing Exponentials & Logs – DFA 12 RETAKE |

**~ Unit 12 At A Glance ~**

Complete the “I am Ready” problems for each lesson below.

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| A graph of a function  AI-generated content may be incorrect.**12.1**For the graph to the left, identify each of the following:A black math equation with numbers  AI-generated content may be incorrect.Domain: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_End Behavior: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Is the function/graph exponential growth or decay? Explain how you know based on the graph and the equation.** |
| **12.2**For the following function, describe its transformation from its parent function (without graphing it first!). How do you know?$$f\left(x\right)=-5\left(\frac{1}{3}\right)^{x-4}-2$$Parent function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ How do you know? \_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal shift: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ How do you know? \_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical shift: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ How do you know? \_\_\_\_\_\_\_\_\_\_\_\_\_\_Any reflections, stretches, and/or compressions? How do you know? |
| A graph of a function  AI-generated content may be incorrect.**12.3**For the graph to the left, identify each of the following:Domain: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A black text on a white background  AI-generated content may be incorrect.End Behavior: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**What is the relationship between a logarithmic function and an exponential function? How is this relationship represented graphically?** |