**Graphing Exponential & Logarithmic Functions**

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

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| Check When Complete | **Whole Class Lesson - L** | | | | | | | Thurs  2/27 |
|  | 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** | | | | | | | Fri  2/28 |
|  | 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** | | | | | | | Mon  3/3 |
|  | 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** | | | | | | | Thurs  3/6 |
|  | Class Lesson – “Graphs of Logs” | | | | | | |
| **Total/20** | **Tasks** | Poster Problems | Quick Notes | CYU #1a | | CYU #1b | |
|  | **Completed?** |  |  |  | |  | |
| Check When Complete | **Whole Class Lesson - O** | | | | | | | Fri  3/7 |
|  | 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?  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?** |