Hon. Math 3: TERMS AND CONCEPTS REVIEW BOOK

\*\*This should be neatly printed in ink – do not type (unless given special permission)! Pencil may ONLY be used if pages are protected by sheet protectors (to prevent smudging). Bind the pages in some way – binder, notebook, etc. **Order the pages in the book the same as what is given here.**

**Title Page – DO NOT include your name – only your student number.**

**Table of Contents**

**Remainder of book: Pages should be numbered and sections should be separated. Keep pages in the order that the topics are listed!** Describe the procedures to do the Math 3 concepts given on these pages. **Each topic should include five facts about the concept (including helpful hints, steps to solving problems, or important things to remember) and two ORIGINAL examples.** I don’t mind if you pull your examples from the internet, but they should not be copied from your notes. These guidelines indicate the MINIMUM that should be discussed – feel free to go above and beyond these basic requirements. These should be in your own words and how it makes sense to you. Some of these will obviously contain more information than others, depending on the concept. You CAN include more than one topic per page, but do NOT exceed 2 topics per page. Do NOT write on the backs of pages, but you can put pages back to back if using sheet protectors.

This project is due *NO LATER THAN* **Wednesday, January 4, 2017**. You will use your student number, and only that number should appear on the book to identify you. Do not put your name anywhere on the book! Each student will be assigned 2 books to review on each due date. To help you not leave the project until the last minute, we will have one preliminary due date before the final due date. **On December 16, the first 11 topics will be due.** You will receive a completeness quiz grade on that due date. Accuracy will not affect these quiz grades, but it will affect your final grade. The final 11 topics will be due on the final due date of December 16. We will do the peer book review in class. Each book should take approximately 30 minutes to adequately review. I, too, will be reviewing the books and looking at how each of you is reviewing them. In the event that you grade a book unfairly, I will have the final say on the book’s grade. **The final project will be calculated in 2nd quarter and final grades.**

**The project will be graded out of 100 points and is worth TWO test grades.**

Each topic can receive a total of 4 points: **4** = great job; **3** = minor point missing or minor error; **2 - 1** = missing major part or multiple minor parts; **0** = not there or incorrect. Neatness/following directions is worth 12 pts. Total points possible: 100. The scores from the reviewers will be totaled along with my review and then averaged to give a final grade. These *should* be graded and returned to you to use for review by January 9.

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| **Topics due by December 16*** Slope-Intercept and Point-Slope Form of a Line
* Parallel and Perpendicular Lines
* Factoring (GCF, trinomials, grouping, difference of squares) and solving
* Standard Form of a Parabola
* Vertex Form of a Parabola
* Quadratic Formula (real and imaginary solutions)
* Completing the Square
* End Behavior and Multiplicity
* Sum and Difference of Cubes
* Imaginary and Irrational Root Theorems
 | **Topics Due by January 4*** Dividing Polynomials (long and synthetic division)
* Finding Vertical & Horizontal Asymptotes and Holes
* Multiplying and Dividing Rational Expressions
* Adding and Subtracting Rational Expressions
* Simplifying Complex Rational Expressions
* Solving Rational Equations
* Finding Inverse Equations
* The Number e and Natural Logarithms
* Properties of Logarithms
* Solving Log and Exponential Equations
* Piece-wise Functions

**FINAL PROJECT DUE JANUARY 4 AT THE BEGINNING OF CLASS!****Projects will be returned by Monday, January 9, to be used to study for your final exam.** **DO YOUR BEST!** |
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**SCORING RUBRIC**

**(DO NOT LOSE THIS! YOUR CLASSMATES AND I WILL NEED IT IN ORDER TO GRADE YOUR REVIEW BOOK.)**

**Completion Check Quiz (December 16) \_\_\_\_\_/11**

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| **Topic (0-4 pts. each)** | **Peer Review** | **Peer Review** | **Teacher Review** | **Final Score** | **Topic (0-4 pts. each)** | **Peer Review** | **Peer Review** | **Teacher Review** | **Final Score** |
| Slope-Intercept and Point-Slope Form of a Line |  |  |  |  | Dividing Polynomials (long and synthetic division) |  |  |  |  |
| Parallel and Perpendicular Lines |  |  |  |  | Finding Vertical & Horizontal Asymptotes and Holes |  |  |  |  |
| Factoring (GCF, trinomials, grouping, difference of squares) and solving |  |  |  |  | Multiplying and Dividing Rational Expressions |  |  |  |  |
| Standard Form of a Parabola |  |  |  |  | Adding and Subtracting Rational Expressions |  |  |  |  |
| Vertex Form of a Parabola |  |  |  |  | Simplifying Complex Rational Expressions |  |  |  |  |
| Focus and Directrix |  |  |  |  | Solving Rational Equations |  |  |  |  |
| Quadratic Formula (real and imaginary solutions) |  |  |  |  | Finding Inverse Equations |  |  |  |  |
| Completing the Square |  |  |  |  | The Number e and Natural Logarithms |  |  |  |  |
| End Behavior and Multiplicity |  |  |  |  | Properties of Logarithms |  |  |  |  |
| Sum and Difference of Cube |  |  |  |  | Solving Log and Exponential Equations |  |  |  |  |
| Imaginary and Irrational Root Theorems |  |  |  |  | Piece-wise Functions |  |  |  |  |
|  |  |  |  |  | **Neatness/Organization/Creativity (12 pts.)** |  |
|  |  |  |  |  | **FINAL SCORE** | **\_\_\_\_\_/100** |