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| **Block** | **Original Lessons** | **Plan to Do** | **If Time Allows** | **Notes** |
| **1** | Check Your ReadinessLesson 1Let’s Make a Box | CYR1.11.21.3\*Lesson 1 Synthesis1.4 |  | Check Your Readiness items 1 and 5 are addressed starting in Lesson 1. If most students struggle with these items, consider skipping Activity 1.2 in order to spend some extra time on the connection between the volume of the box and the dimensions of the cutouts in Activity 1.3.This lesson focuses on introducing polynomials and some situations that polynomials can be used to model. |
| **2** | Lesson 2Funding the FutureLesson 3Introducing Polynomials | 2.12.2\*2.33.1\*3.2\*Lesson 3 Synthesis3.4 | 3.3 | These lessons focus on modeling a situation with a polynomial function and using the structure of the function to explore properties of polynomials.If time is short, use Activity 3.1 as the warm-up activity rather than 2.1, since this activity introduces the vocabulary “degree.” |
| **3** | Lesson 4Combining PolynomialsLesson 5Connecting Factors and Zeros | 4.14.3\*Lesson 4 Synthesis5.1\*5.25.3\*Lesson 5 Synthesis5.4 | 4.2 | These lessons focus on properties of polynomials, including closure under addition and multiplication and the relationship between zeros, factors, and horizontal intercepts.If time is short, replace the warm-up with Activity 5.1.Check Your Readiness items 2 and 4 are addressed in Lesson 4. If most students struggle with these items, plan to spend more time on multiplying linear factors. Check Your Readiness item 3 is addressed in Lesson 5. If most students struggle with this item, plan to emphasize connections between the shape of a function's graph and the factored form of the function. |
| 4 | Lesson 6Different FormsLesson 7Using Factors and Zeros | 6.16.26.4\*Lesson 6 Synthesis7.27.3\*Lesson 7 Synthesis7.4 | 6.3 (optional)7.1 | These lessons focus on features of a function in standard and factored form.Check Your Readiness item 6 is addressed in Lesson 7. If most students struggle with this item, plan to connect what students already know about identifying possible equations for quadratic functions to higher order polynomials.The optional Activity 6.3 will be helpful for students who struggled with Check Your Readiness item 7, which will be addressed in a later lesson. If many students struggled with this item and time is short, consider replacing Activity 6.2 with 6.3. |
| **5** | Lesson 8End Behavior (Part 1)Lesson 9End Behavior (Part 2) | 8.1\*8.2\*8.3Lesson 8 Synthesis9.19.2\*Lesson 9 Synthesis9.4 | 9.3 | These lessons focus on end behavior of graphs of polynomial functions.If time is short, use only the Lesson 8 synthesis before Activity 9.4. |
| **6** | Lesson 10MultiplicityLesson 11Finding Intersections | 10.110.2\*Lesson 10 Synthesis11.111.2\*11.3Lesson 11 Synthesis11.4 | 10.3 (optional) | Lesson 10 focuses on sketching graphs using the structure of a polynomial function and introduces the term “multiplicity.” Lesson 11 focuses on solving systems of equations involving quadratics, graphically and algebraically. |
| **7****(Optional)** | Lesson 12 (Optional)Polynomial Division (Part 1)Lesson 13 (Optional)Polynomial Division (Part 2) | 12.112.213.113.2\*13.3Lesson 13 Synthesis13.5 | 12.313.4 (optional) | These lessons focus on polynomial division.Check Your Readiness items 7 and 8 are addressed in Lesson 12. If most students struggle with item 7, plan to use the optional factoring practice Activity 13.4. If most students struggle with item 8, plan to review integer division before students divide polynomials. |
| **8****(Optional)** | Lesson 14 (Optional)What Do You Know About Polynomials?Lesson 15 (Optional)The Remainder Theorem | 14.114.2\*15.215.3\*Lesson 15 Synthesis15.4 | 14.3 (optional)15.1 | These lessons focus on factoring, polynomial division, and the remainder theorem.The activities in Lesson 14 also provide active review for the Mid-Unit Assessment as students bring together what they have learned so far about sketching graphs of polynomials expressed in factored form and factoring polynomials using division. |
| **9** | Mid-Unit AssessmentLesson 16Minimizing Surface Area | MUA16.116.3\*Lesson 16 Synthesis16.4 | 16.2 | Assessments are designed to be completed in 45 minutes.Complete the Mid-Unit Assessment first, then Lesson 16.Lesson 16 introduces students to rational functions. |
| **10** | Lesson 17Graphs of Rational Functions(Part 1)Lesson 18Graphs of Rational Functions (Part 2) | 17.117.2\*17.318.2\*18.3Lesson 18 Synthesis18.4 | 18.1 | These lessons focus on horizontal and vertical asymptotes for the graphs of rational functions. |
| **11** | GA Learning Plan: Rational Operations | Engage and Explore- Planning a Road Trip Adventure | Diagnostic Assessment- Tic-Tac-Toe | In this learning plan, students will learn to add, subtract, and multiply rational expressions. Through a combination of guided notes, practice problems, and real-life application scenarios, students will develop the necessary skills to perform operations with rational expressions effectively. The plan incorporates relatable contexts, such as planning a road trip and organizing a potluck party, to engage students and highlight the practical applications of rational expressions in everyday situations. By engaging in problem-solving activities and reflecting on their learning, students will develop a strong conceptual understanding of rational expressions and their use in real-world scenarios. |
| **12** | GA Learning Plan: Rational Operations | Apply- Planning a Potluck PartyReflect- Rational OperationsEvidence of Student Success- Formative Assessment |  | In this learning plan, students will learn to add, subtract, and multiply rational expressions. Through a combination of guided notes, practice problems, and real-life application scenarios, students will develop the necessary skills to perform operations with rational expressions effectively. The plan incorporates relatable contexts, such as planning a road trip and organizing a potluck party, to engage students and highlight the practical applications of rational expressions in everyday situations. By engaging in problem-solving activities and reflecting on their learning, students will develop a strong conceptual understanding of rational expressions and their use in real-world scenarios. |
| **13** | Lesson 19 (optional)End Behavior of RationalFunctionsLesson 20Rational Equations (Part 1) | 19.119.219.3\* 20.120.2\*Lesson 19 Synthesis19.4 | 20.3 | Lesson 19 focuses on using long division to rewrite rational functions in order to understand end behavior and is optional. Lesson 20 introduces solving rational equations. |
| **14** | Lesson 21Rational Equations (Part 2)Lesson 22Solving Rational Equations | 21.121.3\* 22.122.2\*Lesson 21 Synthesis21.4 | 21.222.3 | These lessons focus on solving rational equations.Activity 21.2 provides an additional opportunity to solve a rational equation in context, while Activity 22.3 provides extra practice for solving rational equations. |
| **15** | Lesson 23 (optional)Polynomial Identities (Part 1)Lesson 24 (optional)Polynomial Identities (Part 2) | 23.123.2\*23.3\*24.4Lesson 23 Synthesis24.5 | 24.124.224.3 (optional) | These lessons focus on polynomial identities.Activity 23.3 gives students an opportunity to notice structure with an identity students will use in the next lesson and should not be skipped.If you chose to skip these lessons, you will need to teach special case factoring (sum/difference of cubes, difference of squares) in the next unit.  |
|  | Lessons 25-26 |  |  | Skip these lessons |
| **16** | End of Unit Assessment Unit 2 | EOU Assessment |  | Assessments are designed to be completed in 45 minutes. Consider using any additional time for blocks with assessments as flex time to review material or use activities that were skipped earlier in the unit. |

Unused cool-downs: 2.4, 4.4, 6.5, 8.4, 10.4, 12.4, 14.4, 17.4, 20.4, 22.2, 23.4, 26.4