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| **Unit 5 Rational 1** |
| **Concepts*** Day 1- Multiply/Divide Rational expressions (complex fractions, use factoring)
* Day 2- Add, subtract rational expressions (common denominator)
* Day 3- Solving rational functions, extraneous solutions (domain restrictions)
* Day 4- Inverses of rational functions
 | **Core**A.ARP.7A.REI.2F.BF.4Prerequisite skills – Factoring, reducing, adding and subtracting fractions with unlike denominatorsObjectives:I can multiply and divide rational expression and simplify using factoring.I can simplify a rational expression.I can add and subtract rational expressions.I can solve rational equations, checking for extraneous solutions.I can write the expression for the inverse of a rational equation. | **Resources**9-2 Day 1 – Introduce excluded values (includes “closure” discussions)9-1 Day 29-3 adjust #1&2 in homework (clarify instructions)Day 4 – supplement (5-2?) |
| **Unit 6 Rational 2** |
| **Concepts*** inequalities– sign charts
* -graphing
* -asymptotes, analyzing
* -domain and range
* end behavior (limits)
* -transformations
* -discontinuities (holes)

**Vocab*** Domain, range, limit, asymptote, increasing, decreasing, hole, discontinuity, analyze, end behavior, sign chart, transformation
 | **Core*** A.REI.11
* F.IF.7
* F.BF.3

Day 1: Domain, range, End behavior (limits) to introduce asymptotes, increasing, decreasing Day 2: Asymptotes algebraically, discontinuities, transformationsDay 3: Graphing and analyzing Day 4: Inequalities (sign charts) **Objectives** Day 1: I can evaluate the domain and range of a rational functionI can describe the end behavior and write it using limit notationI can explain the connection between end behavior and asymptotesI can describe and denote where a rational function is increasing and decreasingDay 2: I can find the asymptotes and discontinuities by inspection ha ha ;)I can manipulate an equation to describe the transformations of a graph Day 3: I can graph and analyze a rational graph Day 4: I can find the intercepts of a rational functionI can identify solution intervals for inequalities using a sign chart | **Resources**Chapter 8 |