## Unit Name

<table>
<thead>
<tr>
<th>Unit 1: Descriptive and Inferential Statistics</th>
<th>Unit 2: Exponential and Logarithmic Functions</th>
<th>Unit 3: Radical Functions</th>
<th>Unit 4: Modeling Polynomial Functions</th>
<th>Unit 5: Investigating Linear Algebra and Matrices</th>
<th>Unit 6: Trigonometry and the Unit Circle</th>
<th>Unit 7: Rational Functions</th>
<th>Unit 8: Culminating Capstone Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – 6 weeks</td>
<td>5 – 6 weeks</td>
<td>3 – 4 weeks</td>
<td>4 – 5 weeks</td>
<td>2 – 3 weeks</td>
<td>3 – 4 weeks</td>
<td>2 – 3 weeks</td>
<td>1 – 2 weeks</td>
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</tbody>
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### Standards

- AA.DSR.2
- AA.MM.1
- AA.MP.1-5

* A.DSR.10.1* (2 year implementation)

### Content Specific Information

- Inverses - Graphing Log/Exponential Functions: Characteristics and Transformations - Create, interpret, and solve exp/log (one and two variables). - Tables of exp/log - Properties of Logs - Real world application
- Rational exponents - Create, interpret, and solve radical equations (one and two variables). - Modeling and applications of radical functions. - Rational and irrational numbers. - Square root and cube root.
- Graph quadratics in context - Complex numbers and complex conjugate - Complex operations (no division) - Factor and solve quadratics (also in context) - Systems of quadratic and linear functions - Modeling with quadratics in context - Operations with polynomials - Fundamental theorem of algebra, (interpret from graph and functions) - Polynomial identities
- Unit Circle - Trigonometric ratios - Applications of Unit Circle.

*Rewrite simple rational expressions - Rational operations (all) - Graphing rationals and characteristics - Solving rational equations - Applications of rationals

The capstone unit applies content that has already been learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question.
| Differentiation for Tiered Learners | Marietta City Schools teachers provide specific differentiation of learning experiences for all students. Details for differentiation for learning experiences are included on the district unit planners. |