

Thomaston Public Schools - Curriculum Overview and Pacing Guide

Directions - Each colored box below represents one curricular unit. In each box, complete as much of the required information as possible (unit title, unit pacing, unit overview, priority learning targets). On its own, this document will eventually become a public-facing and quick-reference curriculum guide. As suits our curriculum goals, we will eventually use the information you lay out here as the basis for building a fully-expanded curriculum.

A few important points:

1. Unit Title - Your unit title can be thematic (i.e. “The Power and Pain of Love”) or Skill-Based (i.e. Research and Argumentation) or Content-Driven (“Quadratic Functions and Operations”).
2. Unit Pacing - There are approximately forty instructional weeks in a school year, but due to testing, school events, etc., we build a curriculum to cover thirty-six weeks. A full curriculum should contain six units each a minimum of four weeks and maximum of eight weeks long. In total, the units should add up to thirty-six weeks of coverage. The only exception is ELA, which uses quarterly units each 9 weeks long.
3. Unit Overview - The unit overview is a “meaty” paragraph that provides a narrative description of the unit, including major themes, skills, and (possibly) content. Think: In this unit students will (read / do / experience / learn / understand / develop / consider /etc.)...
4. Compelling Questions - Compelling questions are essential. They reflect critical and important inquiries that help students make sense of the world around them through the lenses of specific themes, issues, and topics that connect to specific disciplines. Compelling questions are relevant. They engage students in inquiries that are of personal importance and that ask students to consider themes, issues, and topics that help them connect the content of specific disciplines to their own lives and to their world. For more information, click [here](#).
5. Priority Learning Targets - Each unit should contain three priority learning targets. These are effectively end-of-unit guarantees of what students will be able to do and demonstrate as a result of their learning. As priority learning targets, they are those “level three” learning targets on our eventual proficiency scales that we’ve been developing for a while now. The only exception to three targets per unit are for ELA (5-6 per unit) and history (six per unit, incl. three inquiry targets). These content areas have separate curriculum guide templates.

Course Title: Advanced Algebra (Algebra II)		
School: Thomaston High School	Grade: 11/12	Curriculum Pacing: 36 weeks
Unit One: Functions Overview and Linear Functions	Unit Two: Quadratic Functions	
Unit Pacing: 6 weeks	Unit Pacing: 6 weeks	
<p>Unit Overview: Students begin this first unit of Algebra II by connecting to Algebra I and looking at functions. Students learn in the introduction to this unit that Algebra II is essentially a survey of mathematical functions, and that any quantitative relationship between two variables can be modeled by one or more functions. Therefore, the goal of this course is for students to understand some key points about each function so that they know when to apply them as models. Students are also introduced to piece-wise functions. After this overview, students will review linear functions, then see how to approximate a data set as a linear function using regression analysis. Students will also see how to use correlation of data to determine the precision of a linear model. This unit is based on parts of the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 1 - Functions & Inverse Functions, and Unit 7 - Inferential Statistics (regression analysis). This unit is also integrated with Physics, Unit 1 - Kinematics.</p>	<p>Unit Overview: This unit is a review of quadratic functions from Algebra I, but with more analysis on how to apply quadratic functions as a model. Students will begin by using data sets to produce parabolic graphs, and students will analyze the graphs to identify the vertex, y-intercept and any x-intercepts. Students will then review the different methods to calculate solutions to quadratic functions to find the roots and x-intercepts. Students will also be introduced to the concept of imaginary and complex numbers and relate these to the roots of a quadratic function. Finally, students will apply quadratic functions to model parabolic motion, including analyzing data from physics labs. This unit is based on parts of the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 2 - Quadratic Functions. This unit is also integrated with Physics, Unit 1 - Kinematics and Unit 2 - Dynamics.</p>	
<p>Compelling Questions:</p> <ol style="list-style-type: none"> How can I tell when a mathematical equation or relationship is a function? How can I use linear functions as a model for data or other quantitative relationships? <ul style="list-style-type: none"> CCSS: <ul style="list-style-type: none"> CCSS.MATH.CONTENT.HSF.IF.A.1 CCSS.MATH.CONTENT.HSF.IF.A.2 	<p>Compelling Questions:</p> <ol style="list-style-type: none"> What type of physical situations can I model using quadratic functions? How can I compare a quadratic function to other functions? <ul style="list-style-type: none"> CCSS: <ul style="list-style-type: none"> CCSS.MATH.CONTENT.HSA.CED.A.2 CCSS.MATH.CONTENT.HSF.IF.B.4 CCSS.MATH.CONTENT.HSF.IF.B.5 	

- CCSS.MATH.CONTENT.HSF.IF.A.3
- CCSS.MATH.CONTENT.HSF.IF.B.4
- CCSS.MATH.CONTENT.HSF.IF.B.5
- CCSS.MATH.CONTENT.HSF.IF.B.6
- CCSS.MATH.CONTENT.HSF.IF.C.7
- CCSS.MATH.CONTENT.HSF.IF.C.8
- CCSS.MATH.CONTENT.HSF.LE.A.1
- CCSS.MATH.CONTENT.HSF.LE.A.2
- CCSS.MATH.CONTENT.HSS.ID.B.6
- CCSS.MATH.CONTENT.HSS.ID.C.8
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.SDR.9-12.3

- CCSS.MATH.CONTENT.HSF.IF.B.6
- CCSS.MATH.CONTENT.HSF.IF.C.7.A
- CCSS.MATH.CONTENT.HSA.SSE.B.3.A
- CCSS.MATH.CONTENT.HSA.SSE.B.3.B
- CCSS.MATH.CONTENT.HSA.REI.B.4
- CCSS.MATH.CONTENT.HSA.REI.B.4A
- CCSS.MATH.CONTENT.HSA.REI.B.4B
- CCSS.MATH.CONTENT.HSF.IF.C.8.A
- CCSS.MATH.CONTENT.HSN.CN.A.1
- CCSS.MATH.CONTENT.HSN.CN.A.2
- CCSS.MATH.CONTENT.HSN.CN.A.3
- CCSS.MATH.CONTENT.HSN.CN.C.7
- CCSS.MATH.CONTENT.HSF.BF.A.1.C
- CCSS.MATH.CONTENT.HSS.ID.B.6.A
- 21st Century Skills:
 - T21.CC.9-12.4
 - T21.CIM.9-12.2
 - T21.SDR.9-12.1
 - T21.CTPS.-12.3
 - T21.MIT.9-12.2

Priority Learning Targets

1. I can explain and show how many mathematical relationships can be modeled with functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSF.IF.A.1
 - CCSS.MATH.CONTENT.HSF.IF.A.2
 - CCSS.MATH.CONTENT.HSF.IF.A.3
 - CCSS.MATH.CONTENT.HSF.IF.B.4
 - CCSS.MATH.CONTENT.HSF.IF.B.5
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

Priority Learning Targets

1.I can graph and analyze quadratic functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSA.CED.A.2
 - CCSS.MATH.CONTENT.HSF.IF.B.4
 - CCSS.MATH.CONTENT.HSF.IF.B.5
 - CCSS.MATH.CONTENT.HSF.IF.B.6
 - CCSS.MATH.CONTENT.HSF.IF.C.7.A
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

<p>2. I can use linear functions to model constant rate activity or motion.</p> <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSF.IF.B.6 ○ CCSS.MATH.CONTENT.HSF.IF.C.7 ○ CCSS.MATH.CONTENT.HSF.IF.C.8 ○ CCSS.MATH.CONTENT.HSF.LE.A.1 ○ CCSS.MATH.CONTENT.HSF.LE.A.2 ● 21st Century Skills: <ul style="list-style-type: none"> ○ T21.CC.9-12.3 ○ T21.CTPS.-12.2 ○ T21.CIM.9-12.3 <p>3. I can create a linear model for data sets using linear regression analysis, and I can evaluate the precision of the model.</p> <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSS.ID.B.6 ○ CCSS.MATH.CONTENT.HSS.ID.C.8 ● 21st Century Skills: <ul style="list-style-type: none"> ○ T21.CC.9-12.3 ○ T21.CTPS.-12.2 ○ T21.CIM.9-12.3 	<p>2. I can use various methods to calculate the solutions, including complex number solutions, of a quadratic function.</p> <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSA.SSE.B.3.A ○ CCSS.MATH.CONTENT.HSA.SSE.B.3.B ○ CCSS.MATH.CONTENT.HSA.REI.B.4 ○ CCSS.MATH.CONTENT.HSA.REI.B.4A ○ CCSS.MATH.CONTENT.HSA.REI.B.4B ○ CCSS.MATH.CONTENT.HSF.IF.C.8.A ○ CCSS.MATH.CONTENT.HSN.CN.A.1 ○ CCSS.MATH.CONTENT.HSN.CN.A.2 ○ CCSS.MATH.CONTENT.HSN.CN.A.3 ○ CCSS.MATH.CONTENT.HSN.CN.C.7 ● 21st Century Skills: <ul style="list-style-type: none"> ○ T21.CC.9-12.2 ○ T21.CTPS.-12.2 ○ T21.SDR.9-12.3 <p>3. I can apply quadratic functions to model data sets that show parabolic growth.</p> <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSF.BF.A.1.C ○ CCSS.MATH.CONTENT.HSS.ID.B.6.A ● 21st Century Skills: <ul style="list-style-type: none"> ○ T21.CC.9-12.2 ○ T21.CTPS.-12.4 ○ T21.SDR.9-12.2 ○ T21.MIT.9-12.1
<p>Unit Three: Polynomial Functions</p>	<p>Unit Four: Probability and Statistics</p>
<p>Unit Pacing: 6 weeks</p>	<p>Unit Pacing: 6 weeks</p>
<p>Unit Overview: This unit looks at polynomial functions in general at the start, then focuses on those of 3rd degree and higher for most</p>	<p>Unit Overview: This unit begins with an overview of probability and how to calculate it in different circumstances. Students then learn how</p>

of the unit, extending what students have learned about linear and quadratic functions to the next level. Students begin by graphing polynomials and comparing those of different degrees. Students will note differences especially between odd and even degree polynomials. Students will review how to add, subtract, multiply and divide polynomial functions, then learn to factor 3rd degree and higher polynomials. Finally, students will see how various polynomial functions, singly or in sets of piecewise functions, can model complex situations. This unit is based on parts of the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 3 - Polynomial Functions. This unit is also integrated with Physics, Unit 3 - Energy and Momentum.

to take statistical samples and analyze them for central tendencies and deviation. Students learn about the normal distribution of data sets and how to use this distribution as a model for different cases.. This unit is partly based on the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 7 - Inferential Statistics. This unit could also be integrated with Physics units on thermodynamics or fluid dynamics.

Compelling Questions:

1. How can I learn the basic features of a polynomial function based on the degree of the polynomial?
2. How can I understand the connection between the zeros of a polynomial function, the x-intercepts of the graph of the polynomial function, and the factors of the polynomial?
3. How can polynomial functions provide a model for different situations that I am likely to encounter?

- CCSS:

- CCSS.MATH.CONTENT.HSF.IF.C.7
- CCSS.MATH.CONTENT.HSF.IF.C.7.C
- CCSS.MATH.CONTENT.HSF.IF.C.9
- CCSS.MATH.CONTENT.HSA.SSE.A.2
- CCSS.MATH.CONTENT.HSA.APR.A.1
- CCSS.MATH.CONTENT.HSA.APR.B.2
- CCSS.MATH.CONTENT.HSF.BF.A.1.B
- CCSS.MATH.CONTENT.HSN.CN.C.9
- CCSS.MATH.CONTENT.HSA.APR.C.4
- CCSS.MATH.CONTENT.7.SP.A.2

- 21st Century Skills:

Compelling Question:

1. How can I apply probability to understand uncertain situations?
2. How can I analyze data and find statistically significant trends or values?
3. How can I learn to identify statistical samples that allow me to model a situation using a normal distribution?

- CCSS:

- CCSS.MATH.CONTENT.HSS.CP.A.1
- CCSS.MATH.CONTENT.HSS.CP.A.2
- CCSS.MATH.CONTENT.HSS.CP.A.3
- CCSS.MATH.CONTENT.HSS.CP.A.4
- CCSS.MATH.CONTENT.HSS.CP.A.5
- CCSS.MATH.CONTENT.HSS.CP.B.6
- CCSS.MATH.CONTENT.HSS.CP.B.7
- CCSS.MATH.CONTENT.HSS.CP.B.8
- CCSS.MATH.CONTENT.HSS.CP.B.9
- CCSS.MATH.CONTENT.HSS.MD.A.1
- CCSS.MATH.CONTENT.HSS.MD.A.2
- CCSS.MATH.CONTENT.HSS.MD.A.3
- CCSS.MATH.CONTENT.HSS.MD.A.4

- T21.CC.9-12.4
- T21.CIM.9-12.2
- T21.SDR.9-12.1
- T21.CTPS.-12.3
- T21.MIT.9-12.2

- CCSS.MATH.CONTENT.HSS.MD.B.5
- CCSS.MATH.CONTENT.HSS.MD.B.6
- CCSS.MATH.CONTENT.HSS.MD.B.7
- CCSS.MATH.CONTENT.HSS.ID.A.1
- CCSS.MATH.CONTENT.HSS.ID.A.2
- CCSS.MATH.CONTENT.HSS.ID.A.3
- CCSS.MATH.CONTENT.HSS.ID.A.4
- CCSS.MATH.CONTENT.HSS.ID.B.5
- CCSS.MATH.CONTENT.HSS.ID.B.6
- CCSS.MATH.CONTENT.HSS.ID.C.7
- CCSS.MATH.CONTENT.HSS.ID.C.8
- CCSS.MATH.CONTENT.HSS.ID.C.9
- CCSS.MATH.CONTENT.HSS.IC.A.1
- CCSS.MATH.CONTENT.HSS.IC.A.2
- CCSS.MATH.CONTENT.HSS.IC.B.3
- CCSS.MATH.CONTENT.HSS.IC.B.4
- CCSS.MATH.CONTENT.HSS.IC.B.5
- CCSS.MATH.CONTENT.HSS.IC.B.6

- 21st Century Skills:

- T21.CC.9-12.4
- T21.CIM.9-12.2
- T21.SDR.9-12.1
- T21.CTPS.-12.3
- T21.MIT.9-12.2

Priority Learning Targets

1. I can graph and analyze polynomial functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSF.IF.C.7
 - CCSS.MATH.CONTENT.HSF.IF.C.7.C
 - CCSS.MATH.CONTENT.HSF.IF.C.9
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

2. I can do operations with multiple polynomial functions and factor polynomial functions of 3rd degree and higher.

- CCSS:
 - CCSS.MATH.CONTENT.HSA.SSE.A.2
 - CCSS.MATH.CONTENT.HSA.APR.A.1
 - CCSS.MATH.CONTENT.HSA.APR.B.2
 - CCSS.MATH.CONTENT.HSF.BF.A.1.B
 - CCSS.MATH.CONTENT.HSN.CN.C.9
- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

3. I can use 3rd degree and higher polynomial functions to model complex situations.

- CCSS:
 - CCSS.MATH.CONTENT.HSA.APR.C.4
 - CCSS.MATH.CONTENT.7.SP.A.2
- 21st Century Skills:
 - T21.CC.9-12.2
 - T21.CTPS.-12.2
 - T21.SDR.9-12.3

Priority Learning Targets

1. I can analyze and calculate the probability of an event's chance of occurring.

- CCSS:
 - CCSS.MATH.CONTENT.HSS.CP.A.1
 - CCSS.MATH.CONTENT.HSS.CP.A.2
 - CCSS.MATH.CONTENT.HSS.CP.A.3
 - CCSS.MATH.CONTENT.HSS.CP.A.4
 - CCSS.MATH.CONTENT.HSS.CP.A.5
 - CCSS.MATH.CONTENT.HSS.CP.B.6
 - CCSS.MATH.CONTENT.HSS.CP.B.7
 - CCSS.MATH.CONTENT.HSS.CP.B.8
 - CCSS.MATH.CONTENT.HSS.CP.B.9
 - CCSS.MATH.CONTENT.HSS.MD.A.1
 - CCSS.MATH.CONTENT.HSS.MD.A.2
 - CCSS.MATH.CONTENT.HSS.MD.A.3
 - CCSS.MATH.CONTENT.HSS.MD.A.4
 - CCSS.MATH.CONTENT.HSS.MD.B.5
 - CCSS.MATH.CONTENT.HSS.MD.B.6
 - CCSS.MATH.CONTENT.HSS.MD.B.7
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

2. I can statistically analyze a sample of data by identifying central tendencies and deviations.

- CCSS:
 - CCSS.MATH.CONTENT.HSS.ID.A.1
 - CCSS.MATH.CONTENT.HSS.ID.A.2
 - CCSS.MATH.CONTENT.HSS.ID.A.3
 - CCSS.MATH.CONTENT.HSS.ID.A.4
 - CCSS.MATH.CONTENT.HSS.ID.B.5
 - CCSS.MATH.CONTENT.HSS.ID.B.6

- CCSS.MATH.CONTENT.HSS.ID.C.7
- CCSS.MATH.CONTENT.HSS.ID.C.8
- CCSS.MATH.CONTENT.HSS.ID.C.9
- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

3. I can model data sets using statistical analysis and the normal distribution of data.

- CCSS:
 - CCSS.MATH.CONTENT.HSS.IC.A.1
 - CCSS.MATH.CONTENT.HSS.IC.A.2
 - CCSS.MATH.CONTENT.HSS.IC.B.3
 - CCSS.MATH.CONTENT.HSS.IC.B.4
 - CCSS.MATH.CONTENT.HSS.IC.B.5
 - CCSS.MATH.CONTENT.HSS.IC.B.6
- 21st Century Skills:
 - T21.CC.9-12.3
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

Unit Five: Exponential and Logarithmic Functions	Unit Six: Rational and Power Functions
Unit Pacing: 6 weeks	Unit Pacing: 6 weeks
<p>Unit Overview: This unit begins with a brief review of roots and exponents from Algebra I, then focuses on exponential functions, logarithmic functions and the applications of both functions as models for growth, periodic motion and wave motion. Students learn to graph exponential functions and analyze them to determine their characteristics. Students compare exponential growth with linear growth. Students learn about logarithms, then compare logarithmic functions to exponential functions. Finally, students use exponential and logarithmic functions to model various situations. This unit is based on the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 5 - Exponential and Logarithmic Functions and on parts of CCSS Algebra I, Unit 7 - Roots and Exponents. This unit is also integrated with Physics, Unit 5 - Periodic Motion and Wave Motion.</p>	<p>Unit Overview: This last unit begins with an analysis of rational functions and their graphs, then focuses on power functions, and finally the applications of both functions as models for field forces. Students learn to graph rational and power functions and analyze them to determine their characteristics. Students learn that polynomial functions are part of the rational function family, which is part of the power function family. This spiral back to polynomial functions helps wrap up the course with a summary of all that students have learned about functions. Students also learn how to use rational and power functions to model inverse and direct relationships, with a brief look at probability. This unit is based on the Connecticut Common Core State Standards (CCSS) Algebra II, Unit 4 - Rational and Power Functions and part of Unit 7 - Inferential Statistics. This unit is also integrated with Physics, Unit 6 - Field Forces.</p>
<p>Compelling Questions:</p> <ol style="list-style-type: none"> 1. How can I use exponential functions to model growth and decay? 2. How can I compare logarithmic growth to exponential growth? 3. In what situations can I choose exponential or logarithmic functions as good models? <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSN.RN.A.1 ○ CCSS.MATH.CONTENT.HSA.SSE.B.3.C ○ CCSS.MATH.CONTENT.HSF.LE.A.2 ○ CCSS.MATH.CONTENT.HSF.LE.A.3 ○ CCSS.MATH.CONTENT.HSF.LE.A.4 ○ CCSS.MATH.CONTENT.HSN.Q.A.1 ○ CCSS.MATH.CONTENT.HSA.SSE.B.4 	<p>Compelling Questions:</p> <ol style="list-style-type: none"> 1. How can I understand the behavior of rational and power functions? 2. How can I understand the relationship of rational and power functions to each other and to polynomial functions? 3. How can I understand the way rational and power functions model direct and inverse relationships? <ul style="list-style-type: none"> ● CCSS: <ul style="list-style-type: none"> ○ CCSS.MATH.CONTENT.HSN.RN.A.1 ○ CCSS.MATH.CONTENT.HSN.RN.B.3 ○ CCSS.MATH.CONTENT.HSA.APR.D.6 ○ CCSS.MATH.CONTENT.HSA.APR.D.7 ○ CCSS.MATH.CONTENT.HSF.IF.B.4 ○ CCSS.MATH.CONTENT.HSF.IF.B.5

- CCSS.MATH.CONTENT.HSF.LE.A.1.C
- CCSS.MATH.CONTENT.HSF.LE.B.5
- 21st Century Skills:
 - T21.CC.9-12.4
 - T21.CIM.9-12.2
 - T21.SDR.9-12.1
 - T21.CTPS.-12.3
 - T21.MIT.9-12.2

- CCSS.MATH.CONTENT.HSF.IF.C.7.D
- CCSS.MATH.CONTENT.HSF.IF.B.4
- CCSS.MATH.CONTENT.HSF.IF.B.5
- CCSS.MATH.CONTENT.HSA.REI.A.2
- CCSS.MATH.CONTENT.HSF.IF.B.6
- CCSS.MATH.CONTENT.HSF.IF.C.8
- CCSS.MATH.CONTENT.HSF.BF.A.1
- 21st Century Skills:
 - T21.CC.9-12.4
 - T21.CIM.9-12.2
 - T21.SDR.9-12.1
 - T21.CTPS.-12.3
 - T21.MIT.9-12.2

Priority Learning Targets

1. I can graph and analyze exponential functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSN.RN.A.1
 - CCSS.MATH.CONTENT.HSA.SSE.B.3.C
 - CCSS.MATH.CONTENT.HSF.LE.A.2
 - CCSS.MATH.CONTENT.HSF.LE.A.3
- 21st Century Skills:
 - T21.CC.9-12.2
 - T21.CTPS.-12.1
 - T21.SDR.9-12.3

2. I can compare and relate logarithmic functions to exponential functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSF.LE.A.4
- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2

Priority Learning Targets

1. I can graph and analyze rational functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSN.RN.A.1
 - CCSS.MATH.CONTENT.HSN.RN.B.3
 - CCSS.MATH.CONTENT.HSA.APR.D.6
 - CCSS.MATH.CONTENT.HSA.APR.D.7
 - CCSS.MATH.CONTENT.HSF.IF.B.4
 - CCSS.MATH.CONTENT.HSF.IF.B.5
 - CCSS.MATH.CONTENT.HSF.IF.C.7.D
- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

2. I can graph and analyze power functions.

- CCSS:
 - CCSS.MATH.CONTENT.HSF.IF.B.4
 - CCSS.MATH.CONTENT.HSF.IF.B.5

- T21.CIM.9-12.3

3. I can apply exponential and logarithmic functions to model growth, periodic motion and wave motion.

- CCSS:
 - CCSS.MATH.CONTENT.HSN.Q.A.1
 - CCSS.MATH.CONTENT.HSA.SSE.B.4
 - CCSS.MATH.CONTENT.HSF.LE.A.1.C
 - CCSS.MATH.CONTENT.HSF.LE.B.5
- 21st Century Skills:
 - T21.CC.9-12.2
 - T21.CTPS.-12.1
 - T21.SDR.9-12.3
 - T21.MIT.9-12.1

- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3

3. I can apply rational and power functions to model field forces.

- CCSS:
 - CCSS.MATH.CONTENT.HSA.REI.A.2
 - CCSS.MATH.CONTENT.HSF.IF.B.6
 - CCSS.MATH.CONTENT.HSF.IF.C.8
 - CCSS.MATH.CONTENT.HSF.BF.A.1
- 21st Century Skills:
 - T21.CC.9-12.1
 - T21.CTPS.-12.2
 - T21.CIM.9-12.3