Coconino High School
Week #7 Learning Guide

Course	Pre-Calculus	Week Assigned	May 18-May 22
Lesson Title	Sequences and Series		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**A2.F-BF.A.2** Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms. **A2.A-SSE.B.4** Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments.		
Learning Goal	SWBAT determine an equation for a sequence. SWBAT evaluate a series.		
Essential Questions	What is the difference between a sequence and a series?		
Learning Activity	For Online: ● Go to Google classroom to find the lesson videos and practice problems Printed Materials: ● Use the sequences and series handout to learn the material (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	For Online: ● Use Google classroom to find the videos Printed Materials: ● Lesson: ○ https://drive.google.com/file/d/1ta84pf7OYR-vr4QB_58jeeNbTkCA5ZNp/view?usp=sharing ● Practice: ○ https://drive.google.com/file/d/1vf8unusdoNdUUEFWZAcbwA33Zdli5oTE/view?usp=sharing		
Extension & Enrichment	Taylor series expansions		

Coconino High School
Week #6 Learning Guide

Course	Pre-Calculus	Week Assigned	May 11-May 15
Lesson Title	Logarithms Review		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**P.F-BF.B.5** Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.		
Learning Goal	SWBAT use logarithms to solve equations.		
Essential Questions	What are logarithms?		
Learning Activity	For Online: ● Go to Google classroom to find the lesson videos and practice problems Printed Materials: ● Use the logarithms handout to review logarithms (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	For Online: ● Use Google classroom to find the videos Printed Materials: ● Lesson: ○ https://drive.google.com/file/d/1lYqHc8rg5MMGoWeMOBDZKLo_Hjqsklcc/view?usp=sharing ● Practice: ○ https://drive.google.com/file/d/1DPROPvGKD5Ll7ha2ASdwFjbvhRFwQv5C/view?usp=sharing		
Extension & Enrichment	● Use logarithms to solve real-world problems.		

Coconino High School
Week #5 Learning Guide

Course	Pre-Calculus	Week Assigned	May 4-May 8
Lesson Title	Exponential Functions Review		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**A2.A-SSE.B.3** Use the properties of exponents to transform expressions for exponential functions **RFR.AF** Analyze Functions		
Learning Goal	SWBAT use exponential properties to solve problems. SWBAT graph exponential functions.		
Essential Questions	How can we use properties of exponentials to solve problems?		
Learning Activity	For Online: ● Go to Google classroom to find the lesson videos and practice problems Printed Materials: ● Use the exponential functions handout to review exponential functions (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	For Online: ● Use Google classroom to find the videos Printed Materials: ● Lesson: ○ https://drive.google.com/file/d/1vzehSg6aZ_NVjHh53vEhT-zAu9WNjeTj/view?usp=sharing ● Practice: ○ https://drive.google.com/file/d/1mmnINkBNz4BGM3VLEjB1pdx6DACM8dVE/view?usp=sharing		
Extension & Enrichment	● Use exponential functions to solve real-world problems.		

Coconino High School
Week #4 Learning Guide

Course	Pre-Calculus	Week Assigned	April 27-May 1
Lesson Title	Rational Functions Review		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**RFR.AF** Analyze Functions		
Learning Goal	SWBAT graph rational functions.		
Essential Questions	What are the characteristics of the graphs of rational functions?		
Learning Activity	For Online: ● Go to Google classroom to find the lesson videos and practice problems Printed Materials: ● Use the rational functions handout to review rational functions (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	For Online: ● Use Google classroom to find the videos Printed Materials: ● Lesson: ○ https://drive.google.com/file/d/1vAz4LK-AJv-_DHrZ-v3CO3rquLlA_2dk/view?usp=sharing ● Practice: ○ https://drive.google.com/file/d/1yHUcNJDR16NQr-fXuOdfUTPBcceyFWTR/view?usp=sharing		
Extension & Enrichment	● Use rational functions to solve real-world problems.		

Coconino High School
Week #3 Learning Guide

Course	Pre-Calculus	Week Assigned	April 20-24
Lesson Title	Quadratics and Polynomials Review		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**A1.A-SSE.B** Write expressions in equivalent forms to solve problems. **A1.A-APR.B** Understand the relationship between zeros and factors of polynomials. **A1.F-IF.C** Analyze functions using different representations.		
Learning Goal	SWBAT graph quadratic and polynomial functions.		
Essential Questions	What are the characteristics of the graphs of polynomial functions?		
Learning Activity	<u>For Online:</u> ● Go to Google classroom to find the lesson videos and practice problems <u>Printed Materials:</u> ● Use the quadratic and polynomials handout to review quadratics and polynomials (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	<u>For Online:</u> ● Use Google classroom to find the videos <u>Printed Materials:</u> ● Print the following: ○ https://drive.google.com/file/d/1NZgZqikfd2aYhE3bK5J7WXnxfx9497z_/view?usp=sharing ○ https://drive.google.com/file/d/1IPlWspAwaQye-KkdPwJl-9Pf7zDPWu1z/view?usp=sharing		
Extension & Enrichment	● Use quadratics and polynomials to solve real-world problems.		

Coconino High School
Week #2 Learning Guide

Course	Pre-Calculus	Week Assigned	April 13-17
Lesson Title	Parametric Equations		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**RV.MP.1** Model real-world contexts with parametric equations **RV.MP.2** Use parametric equations to solve problems. **RV.MP.3** Graph parametric equations and identify orientation. **RV.MP.4** Analyze and interpret the graphs of parametric equations.		
Learning Goal	SWBAT solve problems involving parametric equations.		
Essential Questions	How can we use parametric equations to solve problems?		
Learning Activity	For Online: ● Go to Google classroom to find the lesson videos and practice problems Printed Materials: ● Use the parametric equations handout to learn about parametric equations (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		
Resources	For Online: ● Use Google classroom to find the videos Printed Materials: ● Print the following: ○ https://drive.google.com/file/d/1i04b1dWqqghyYPeJml5MYANGyQCD9sM5/view?usp=sharing ○ https://drive.google.com/file/d/1T1NF_Zk3VOi6hYkB4qgLaObfmLv5wSwF/view?usp=sharing		
Extension & Enrichment	● Use parametric equations to solve real-world problems.		

Coconino High School
Week #1 Learning Guide

Course	Pre-Calculus	Week Assigned	April 6-10
Lesson Title	Vectors in the Plane		
Teacher(s), Email, & Other Contact Information	Jonathan Edwards, jedwards1@fusd1.org		
Target Standards	**RV.EV.1** Recognize vector quantities as having both magnitude and direction. **RV.EV.2** Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes. **RV.EV.3** Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. **RV.EV.4** Solve problems involving velocity and other quantities that can be represented by vectors. **RV.EV.5** Add and subtract vectors, and multiply a vector by a scalar.		
Learning Goal	SWBAT solve problems involving vectors and properties of vectors.		
Essential Questions	How can we use vectors to solve problems?		
Learning Activity	<u>For Online:</u> ● Go to Google classroom to find the lesson videos and practice problems ● Deltamath problems (only graded portion of this lesson, all for extra credit) <u>Printed Materials:</u> ● Read pages 445-453 in our textbook and do the problems starting on page 454: ○ #11-23 odds, 31, 35, 39-47 odds, 53-61 odds, 87, 89, 101 ● Use the vectors handout to learn about vectors (underline the key points and try the sample problems) ○ Do the practice problems handout for a grade.		

Resources	For Online: ● Use Google classroom to find the videos ● Use www.deltamath.com to access the graded problems Printed Materials: ● Use your book to access the content ● Print the following: ○ https://drive.google.com/file/d/15EzJpIs1XLTX9HhmB6cy4zcoQ1bndUV6/view?usp=sharing ○ https://drive.google.com/file/d/1TACVAp3_Lc4wAfzoCVfH4-VXxiKs7x8R/view?usp=sharing
Extension & Enrichment	● Students will have the opportunity to apply what they've learned about vectors to real-world applications. ● The dot product for vectors.