Series and Conics

	4 Mastani	2 Drofisiont	2 Pasia	1 Palaw Pasia	0 – No
	4 – Mastery	3 – Proficient	2 - Basic	1 – Below Basic	Evidence
Recursive	Can extend	Write an explicit formula	Write an explicit formula	Write an explicit and	Little
and Explicit	thinking beyond	to model a situation in	to model a situation in	recursive function for an	evidence
Functions	the standard,	context.	<u>context.</u>	arithmetic or geometric	of
(F.BF.1a, F.IF.3, A.SSE.4)	including tasks			sequence.	reasoning
	that may involve	Use an explicit formula to find any term(s) in a	Use an explicit and recursive function to find	<u>Identify characteristics</u> (first term, common ratio,	or
A.33E.47	one of the				application
	following:				to solve
	 Designing 	sequence given two non-	any term(s) in a sequence.	etc) of an arithmetic or	the
	Connecting	consecutive terms.		geometric sequence.	problem
	Synthesizing				
	Applying				
	 Justifying 				Does not
	Critiquing				meet the
	Analyzing				criteria in
	Creating				a level 1
	Proving				

Instructional Focus: Explore sequences

Series and Conics

	4 Mastani	3 – Proficient	2 Basia	1 – Below Basic	0 – No
	4 – Mastery	3 – Proficient	2 - Basic		Evidence
Finite and	Can extend	Use the finite and infinite	Use the finite and infinite	Find the sum, using the	Little
infinite	thinking beyond	formulas for geometric	formulas for geometric	finite and infinite	evidence
formulas	the standard,	series to solve real-world	series to find:	formulas, for geometric	of
(A.SSE.4)	including tasks	problems	• sum	series	reasoning
	that may involve		• <u>first term</u>		or
	one of the		last term		application
	following:		• <u>rate</u>		to solve
					the
	 Designing 				problem
	 Connecting 				
	Synthesizing				
	Applying				Does not
	 Justifying 				meet the
	Critiquing				criteria in
	Analyzing				a level 1
	Creating				
	Proving				

A.SSE.4 (edited) Use the finite and infinite formulas for geometric series to solve problems. For example, calculate mortgage payments. 🖈

Series and Conics

Instructional Focus: Derive the equation of ellipses and hyperbolas

	4 – Mastery	3 – Proficient	2 - Basic	1 – Below Basic	0 – No Evidence
Conics (G.GPE2, G.GPE.3)	 4 – Mastery Can extend thinking beyond the standard, including tasks that may involve one of the following: Designing Connecting Synthesizing Applying Justifying Critiquing Analyzing 	3 – Proficient <u>Write the equation</u> of a parabola given its focus and directrix. Write the standard equation of an ellipse or hyperbola given the graph, <u>foci, or general</u> <u>form of the equation</u> . Identify the center, vertices, <u>and foci</u> given the equation of an ellipse or hyperbola	2 - Basic Identify the equation of a parabola given its focus and directrix. Write the standard equation of a hyperbola or ellipse given the graph Identify the center and vertices of an ellipse or hyperbola given the graph or equation	 1 – Below Basic Identify the focus and directix of a parabola <u>Identify</u> if a given equation represents an ellipse or hyperbola Identify the <u>center</u> of an ellipse or hyperbola given the graph or equation 	0 – No Evidence Little evidence of reasoning or application to solve the problem Does not meet the criteria in a level 1
	Critiquing			the graph or equation	level 1

G.GPE.2 Derive the equation of a parabola given a focus and directrix.

G.GPE.3 (+) Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant.