F30.1a Student demonstrates an understanding of financial decision making involving investing money, including analysis of compound interest and investment portfolios.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	I can determine the	I can answer questions based on	I can calculate the value of
with becoming	value of a missing	compound interest questions (ie.	a complex investment
consistent with	variable in a simple/	find interest earned, rate of	portfolio.
the criteria.	compound interest	return, rank investments,	I can compare investment
	problem.	compare investments, etc.)	portfolios and make
		I can use the Rule of 72	recommendations.
		I can graph an investment and	I can demonstrate my
		analyze the graph	understanding of what it
		I can calculate the value of a basic	means to be financially
		investment portfolio.	literate.

F30.1b Student demonstrates an understanding of financial decision making involving borrowing money including analysis of renting, leasing, buying and credit.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	I can determine the	I can solve questions based	I can demonstrate my
with becoming	value of a missing	on financial problems	understanding of financial
consistent with	variable in a financial	involving renting, leasing,	decisions to be made involving
the criteria.	problem involving	buying or credit (ie. find	borrowing money.
	renting, leasing, buying	total interest paid, total	I can do cost and benefit
	or credit.	cost of loan, time to pay off	analysis when a mortgage is
		loan, basic cost and benefit	involved.
		analysis. etc.)	

F30.2 Student demonstrates an understanding of inductive and deductive reasoning.				
Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)	
I need more help	I can:	I can:	I can demonstrate my	
with becoming	*Identify the hypothesis,	*Write a conditional statement	understanding of	
consistent with	*Identify the conclusion	*Write a biconditional	conditional statements.	
the criteria.	*Write the converse	statement		
	*Find a counterexample	*Determine and verify if a	I can demonstrate my	
	*Write the inverse	statement is true	understanding of	
	*Write the contrapositive	*Determine if a conditional	analysis of puzzles and	
		statement is biconditional	games.	
		* Solve a basic		
		puzzle/game/problem		

F30.3 Demonstrate understanding of set theory and its applications.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	<u>Given</u> a Venn diagram, I	I can <u>create</u> a Venn	I can do an analysis of solutions
with becoming	can answer questions	diagram for <u>two data sets</u>	for errors.
consistent with	pertaining to the empty	and analyze the results.	I can <u>create</u> a Venn diagram for
the criteria	set, disjoint sets, subsets,	I can determine the	three data sets and analyze the
	universal sets, union,	complement of a set.	results.
	and intersection.		I can demonstrate my
			understanding of set theory.

F30.4 Student extends understanding of odds and probability.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help with	I can express odds as a	I can solve contextual	I can demonstrate my
becoming consistent	probability and vice versa.	problems that involve	understanding of odds
with the criteria		odds and probability.	and probability.

F30.5 Student extends understanding of the probability of two events, including events that are: mutually exclusive, non-mutually exclusive, and dependent.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help with	I can determine if two events	I can represent	I can create problems that
becoming consistent	are mutually exclusive or	mutually exclusive	involve the probability of
with the criteria.	non-mutually exclusive.	events and non-	mutually exclusive events
	I can determine if two events	mutually exclusive	or non-mutually exclusive
	are independent or	events.	events.
	dependent.	I can solve problems	I can demonstrate my
	I can solve basic problems	that involve the	understanding of the
	that involve the probability	probability of two	probability of two events.
	of mutually exclusive events.	events (exception	I can solve problems that
	I can solve basic problems	probability of an event	find the probability of an
	that involve the probability	given occurrence of a	event given the occurrence
	of independent events	previous event).	of a previous event.

F30.6 Student demonstrates an understanding of combinatorics including, fundamental counting principle, permutations and combinations.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	I can evaluate	I can list all of the options to	I can demonstrate my
with becoming	factorials.	a counting problem (I may	understanding of counting
consistent with	I can solve basic	use a graphic organizer)	problems.
the criteria.	permutation and	I can solve permutations	I can simplify factorial expressions
	combination	with conditions, repetition,	and solve factorial equations
	problems when I	where objects are not	I can explain how factorials are
	am told which	distinguishable	related to permutations and
	type it is.	I can solve combinations	combinations
	I can solve basic	from more than one set;	I can solve situational questions
	fundamental	with conditions;	involving probability and
	counting principle	I can solve situational	permutations
	problems.	questions involving the	I can compare and contrast
		fundamental counting	permutations and combinations
		principle.	-

F30.7a Student represents data, using polynomial functions (of degree \leq 3), to solve problems.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	I can match equations of	I can determine the	I can demonstrate my
with becoming	polynomial functions to	characteristics of	understanding of polynomial
consistent with	their corresponding	polynomial functions from	functions. This may be done
the criteria.	graphs.	their graphs or equations.	through interpreting graphs of
	I can graph and	I can identify the degree	polynomial functions to
	determine (with	and sign of the leading	describe the situations that
	technology) the	coefficient for a polynomial	each function models and
	polynomial function that	function.	explain the reasoning or solve
	best approximates the	I can interpolate and	situational questions that
	data.	extrapolate data from	involve data that is best
		polynomial situations.	represented by graphs of
			polynomial functions and
			explain the reasoning.

F30.7b Student represents data, using exponential and logarithmic functions, to solve problems.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more	I can match equations	I can determine the	I can demonstrate my understanding
help with	of exponential and	characteristics of	of exponential and logarithmic
becoming	logarithmic functions to	exponential and	functions. This may be done through
consistent	their corresponding	logarithmic functions	interpreting graphs of exponential and
with the	graphs	from their equations or	logarithmic functions to describe the
criteria.	I can graph and	graphs	situations that each function models
	determine (with		and explain the reasoning or solve
	technology) the	I can interpolate and	situational questions that involve data
	exponential or	extrapolate data from	that is best represented by graphs of
	logarithmic function	exponential and	exponential and logarithmic functions
	that best approximates	logarithmic situations.	and explain the reasoning.
	the data.		

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I need more help	I can match equations	I can determine the	I can demonstrate my understanding of
with becoming	of sinusoidal functions	characteristics of	sinusoidal functions. This may be done
consistent with	to their corresponding	sinusoidal functions	through interpreting graphs of
the criteria.	graphs	from their equations	sinusoidal functions to describe the
	I can graph and	or graphs	situations that each function models
	determine (with		and explain the reasoning or solve
	technology) the		situational questions that involve data
	sinusoidal function that		that is best represented by graphs of
	best approximate s the		sinusoidal functions and explain the
	data.		reasoning.

F30.7c Student represents data, using sinusoidal functions, to solve problems.

F30.8 Student researches and gives a presentation on a current event or an area of interest that requires data collection and analysis.

Degining (1) A	pproaching (2)	Proficiency (3)	Mastery (4)
I need more help I an with becoming how consistent with inv the criteria. eve col wa top	m able to show w math was volved in my ent/area. I llected data that as relevant to my pic	I am able to explain the connection to math in my event/area. If there were any bias or points of view then I could identify these. I was able to identify my data collection method.	I am able to explain the importance of the math involved in my event/area. I am able to interpret my data as to how it impacts society. I can identify any controversial issues and present multiple sides of the issues with supporting data if applicable