

M103 Modeling with Functions of Quadratic Type Badge Portfolio: A Showcase of Your Learning

Section 1: Required Tasks

Show off what you did! Submit work (or another agreed upon way of showing your thinking) for each of the tasks listed below.

	I Can Statements	Required Tasks	Student Reflection: What new learning does the task showcase?
103.a	Engage in the modeling cycle (performance assessment).	<ul style="list-style-type: none"> XQ Math Badging Performance Assessment: M103 Take Me Out to the Ball Game OR IM Algebra I: Unit 6 Modeling Prompt 8: Designing a Fountain 	
103.b	Interpret quadratic functions that arise in applications in terms of the context.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 6 Activity 2: Graphing Another Cannonball 	
103.c	Analyze quadratic functions using different representations.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 6 Activity 2: Graphing Another Cannonball 	
103.e	Construct and compare linear and quadratic models and solve problems.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 6 Warm-up: Skybound & Activity 1: Tracking a Cannonball 	

Section 2: Choose Your Favorites

Show off your favorite work! For each expectation, SELECT at least one task from each group to demonstrate what you are learning. Which work do you feel best showcases all of the math you have learned?

	I Can Statements	Select at least one from each set	Student Reflection: What new learning does the task showcase?
103.b	Interpret quadratic functions that arise in applications in terms of the context.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 5 Activity 2: Galileo and Gravity IM Algebra I: Unit 6 Lesson 7 Activity 2: Domain, Vertex, and Zeros IM Algebra I: Unit 6 Lesson 7 Cool-down: Making the Greatest Revenue IM Algebra I: Unit 6 Lesson 14 Warm-up: A Jumping Frog 	
103.c	Analyze quadratic functions using different representations.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 6 Cool-down: Rocket in the Air IM Algebra I: Unit 6 Lesson 7 Cool-down: Making the Greatest Revenue 	
103.d	Build quadratic functions that model relationships between two quantities.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 17 Activity 2: A Peanut Jumping over a Wall IM Algebra I: Unit 6 Lesson 3 Cool-down: A Quadratic Function? IM Algebra I: Unit 6 Lesson 5 Cool-down: Where Will it Be? 	

	I Can Statements	Select at least one from each set	Student Reflection: What new learning does the task showcase?
103.e	Construct and compare linear and quadratic models and solve problems.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 2 Activity 1: Patterns of Dots 	
103.f	Interpret expressions for quadratic functions in terms of the situation they model.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 6 Activity 2: Graphing Another Cannonball IM Algebra I: Unit 6 Lesson 6 Cool-down: Rocket in the Air 	
103.g	Summarize, represent, and interpret data on two quantitative variables for linear and quadratic model fits.	<ul style="list-style-type: none"> None 	
103.h	Understand the relevance of modeling with quadratic functions.	<ul style="list-style-type: none"> Any tasks can be used but suggest using at least one from 103.a 	
103.i	Use a quadratic function model to determine values of interest in a real-world problem.	<ul style="list-style-type: none"> IM Algebra I: Unit 6 Lesson 5 Activity 2: Galileo and Gravity IM Algebra I: Unit 6 Lesson 7 Cool-down: Making the Greatest Revenue 	