

# M151 Modeling with Geometry 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.

	<b>I Can Statements</b>	<b>Required Tasks</b>	<b>Student Reflection: What new learning does the task showcase?</b>
151.a	Engage in the modeling cycle (performance assessment).	<ul style="list-style-type: none"><li>• XQ Math Badging <a href="#">Performance Assessment</a>: M151 Designing a Zoo Enclosure</li></ul>	
151.b	Use geometric shapes, their measures, and their properties to describe objects.	<ul style="list-style-type: none"><li>• IM Geometry: <a href="#">Unit 5 Lesson 8</a> Activity 2: Jumbo Can</li></ul>	
151.g	Solve real-world problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	<ul style="list-style-type: none"><li>• IM Geometry: <a href="#">Unit 5 Lesson 17</a> Activity 2: A Fishy Situation</li></ul>	

## 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?
151.b	Use geometric shapes, their measures, and their properties to describe objects.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 1</a> Cool-down: Telescope</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 1</a> Practice: Problem 2</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 2</a> Activity 2: Stack 'Em Up</li> </ul>	
151.c	Apply concepts of density based on area and volume in modeling situations.	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 17</a> Activity 1: Light as a Feather</li> </ul>	
151.d	Apply geometric methods to solve design problems.	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 1</a> Cool-down: Telescope</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 1</a> Practice: Problem 2</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 14</a> Activity 2: An Icy Pyramid</li> </ul>	
151.e	Give an informal argument for the	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 2</a> Practice: Problem 6</li> </ul>	

	<b>I Can Statements</b>	<b>Select at least one from each set</b>	<b>Student Reflection: What new learning does the task showcase?</b>
	formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 13</a> Activity 2: Comparing Cross Sections</li> </ul>	
151.f	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 10</a> Activity 2: Equal Volume?</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 9</a> Activity 2: Revisiting Rotation</li> </ul>	
151.g	Solve real-world problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 8</a> Activity 2: Jumbo Can</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 5</a> Warm-up: Transamerica Building</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 15</a> Warm-up: Maximizing Area</li> </ul>	
151.h	Use the Pythagorean theorem to solve right triangles in applied problems.	<ul style="list-style-type: none"> <li>IM Geometry: <a href="#">Unit 5 Lesson 11</a> Warm-up: New Heights</li> <li>IM Geometry: <a href="#">Unit 5 Lesson 15</a> Activity 1: Missing Measurements</li> </ul>	