

M205 Modeling with Trigonometric Functions 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?
205.d	Analyze trigonometric functions using different representations.	<ul style="list-style-type: none">IM Algebra II: Unit 6 Lesson 11 Activity 3: Cosine and Sine Together	
205.e	Use trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	<ul style="list-style-type: none">IM Algebra II: Unit 6 Lesson 13 Activity 1: Blowing in the Wind	

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?
205.a	Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	<ul style="list-style-type: none"> IM Geometry: Unit 7 Lesson 11 Cool-down: Find a Radian Measure IM Geometry: Unit 7 Lesson 12 Activity 1: Degrees Versus Radians 	
205.b	Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers.	<ul style="list-style-type: none"> IM Algebra II: Unit 7 Lesson 5 Cool-down: The (Pythagorean) Identity of Any Point IM Algebra II: Unit 7 Lesson 6 Cool-down: Sin() and a Quadrant 	
205.c	Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.	<ul style="list-style-type: none"> IM Algebra II: Unit 6 Lesson 1 Activity 1: Around and Around IM Algebra II: Unit 6 Lesson 11 Cool-down: Turn it Around Again IM Algebra II: Unit 6 Lesson 11 Are you Ready for More?: The Big Picture for Cosine and Sine 	
205.d	Analyze trigonometric functions using different representations.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> IM Algebra II: Unit 6 Lesson 13 Activity 2: Up, Up, and Away IM Algebra II: Unit 6 Lesson 14 Cool-down: Translating and Stretching 	
205.e	Use trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	(Optional if additional evidence is needed) <ul style="list-style-type: none"> IM Algebra II: Unit 6 Lesson 18 Activity 2: Modeling the Carousel Motion 	