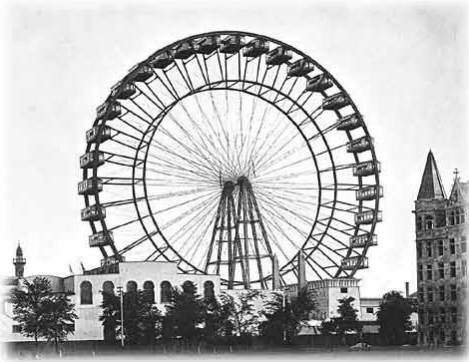


Project: Ferris Wheel



Your job is to research a particular ferris wheel and write an equation that would represent a rider's height on the ferris wheel at any given time.

You will present your findings on a Google Slides/PowerPoint. Your presentation should include:

- History, background information, and/or features of the particular ferris wheel
- A picture/drawing of the ferris wheel
- An equation that represents the rider's height
- A neatly labeled graph representing the function
- An explanation for how you obtained the equation for the rider's height at time t in laymen's terms (Do not assume that your audience knows anything about trigonometric functions! e.g. You might want to explain WHY you would use a sinusoidal function to model the function)

Be colorful and creative!

Project: Ferris Wheel Rubric

Mathematics: Correct Equation <ul style="list-style-type: none"> Does the equation I wrote consider the... <ul style="list-style-type: none"> Height of the Ferris Wheel Base Starting Point of a Passenger Period Base Function (sin/cos) Reflection (if applicable) Units Does the equation I wrote match the description of the Ferris wheel? Have I checked my equation using a graphing utility (e.g. graphing calculator, Desmos)? 	Done?
Mathematics: Justification <ul style="list-style-type: none"> Have I explained why a sinusoidal function would be used to model this situation? Have I explained why the equation I wrote satisfies the description given? Have I considered all parts of the equation in offering an explanation? Have I defined any terms that may be unfamiliar to my audience? 	
Mathematics: Graph <ul style="list-style-type: none"> Does my graph match the equation I offered? Are the axes on my graph labeled with appropriate units? Is my scale consistent? Have I used technology or graph paper to neatly sketch my graph? Have I “curved” my sinusoidal functions? 	
Research <ul style="list-style-type: none"> Have I offered a stimulating introduction of the Ferris wheel’s history and background? Have I offered a detailed description of the Ferris wheel’s features, etc.? Have I included a picture of the Ferris wheel? Have I cited any sources using proper MLA format? (This can be typed on a citation slide) 	
Format <ul style="list-style-type: none"> Is my presentation neat, colorful, and creative? Is my presentation engaging? Have I typed my explanations/descriptions, where appropriate? Is my presentation free of grammar and spelling errors? 	
Personal Engagement/Audience <ul style="list-style-type: none"> Have I assumed that my audience knows something about trigonometric functions? Have I used laymen’s terms to describe why this is the correct equation? 	