

	MONDAY (B) NOT TEACHING	TUESDAY (A) IN PERSON 10:00-11:35 IN PERSON 2:35-4:05	WEDNESDAY (B) NOT TEACHING	THURSDAY (A) IN PERSON 10:00-11:35 IN PERSON 2:35-4:05	FRIDAY (B) NOT TEACHING
	Objective(s): SWBAT	Objective(s): SWBAT *Accurately draw $\sin(x)$ and $\cos(x)$ functions and label their key features *Interpret trig functions in terms of triangles and the unit circle *Create and explain equations involving trig functions using the geometry of the unit circle	Objective(s): SWBAT	Objective(s): SWBAT *Take and understand derivatives of circular functions ($\cos(x)$ and $\sin(x)$)	Objective(s): SWBAT
P	Engage	Engage How do we define time? What is a second? Could we use other definitions to keep track of time? Students will reason that any consistent periodic behavior can be used to measure time	Engage	Engage Students will analyze the behavior of a simple pendulum and interpret it in terms of circular motion and trig functions. Students will discuss derivatives in terms of position, velocity, and acceleration	Engage
L A	Explain Explore Elaborate	Explore Students will use DESMOS to finish graphing trig functions and identifying key features Explain Students will analyze and explain the symmetries they observe by plotting trig functions Elaborate Students will define and describe even and odd functions in terms of symmetry, using trig functions as examples	Explore Explain Elaborate	Explore Students will recall the graphs of $\sin(x)$, $\cos(x)$, $\tan(x)$. Students will discuss and recall the meaning of a derivative and a limit Explain Students will use DESMOS to explain the behavior of the slope of the second line for $\sin(x)$. Students will plot this as a function and interpret it in terms of other trig functions Elaborate Students will guess what the derivative will be for $\cos(x)$, and they will check their hypotheses using DESMOS	Explore Explain Elaborate
N	Evaluate and Summary	Evaluate and Summary Exit ticket; summary notes	Evaluate and Summary	Evaluate and Summary Exit ticket; summary notes	Evaluate and Summary
Resources:		DESMOS, computers		DESMOS, computers, simple pendulum	