

## Sinusoidal Applications - Calculator Guidelines

Steps/Guidelines	TI-83 or TI-84	TI-Nspire
		<b>** Do NOT use "Scratchpad" - use "Documents" **</b>
→ correct <b>MODE</b> - degrees or radians?	<b>MODE</b> > RADIAN or DEGREE	Settings > Settings > General > Radian > make default
→ adjust the <b>WINDOW</b>	WINDOW (adjust accordingly)	menu > Window/Zoom > Window Settings (adjust accordingly)
→ enter the <b>equation</b>	<b>Y=</b> (enter appropriate equation)	f(x) = (enter appropriate equation) - use "x" in radian AND degree mode!
→ to <b>evaluate</b> a function (given an x-value)	<b>2ND</b> > <b>CALC</b> > Value > (type in value) <b>ENTER</b>	CTRL > +page > add calculator > type f1(value)
→ to find a <b>maximum</b> or <b>minimum</b>	<b>2ND</b> > <b>CALC</b> > Min or Max > left bound? (move cursor to left of point) <b>ENTER</b> , right bound? (move cursor to right of point) <b>ENTER</b> , guess? (move cursor close to point) <b>ENTER</b>	Menu > Analyze Graph > Min or Max (move line to left of point) <b>ENTER</b> , (move line to right of point) <b>ENTER</b>
→ to find a <b>zero (x-intercept)</b>	<b>2ND</b> > <b>CALC</b> > Zero > left bound? (move cursor to left of intercept) <b>ENTER</b> , right bound? (move cursor to right of intercept) <b>ENTER</b> , guess? (move cursor close to intercept) <b>ENTER</b>	Menu > Analyze Graph > Zero (move line to left of intercept) <b>ENTER</b> , (move line to right of intercept) <b>ENTER</b>
→ to <b>solve an equation</b> for x (often time) given a y-value f(x)	Graph another function $y_2 =$ (horizontal) <b>2ND</b> > <b>CALC</b> > Intersect > (move cursor to $y_1$ ) <b>ENTER</b> , (move cursor to $y_2$ ) <b>ENTER</b> > (move cursor close to intersection) <b>ENTER</b>	Menu > Analyze Graph > Intersection (move line to left of intersection) <b>ENTER</b> , (move line to right of intersection) <b>ENTER</b>