

## Quick Reference Sheet

### Open up Audio Graphing Calculator

F1	Open help file
F7	Shrinks the calculator screen
F8	Enlarges the calculator screen
Ctrl +R	reads the item that has focus
Alt+S	toggles speech on and off
Alt+F	opens file menu
Alt+O	opens options menu
Alt+G	opens graphing menu
Alt+H	opens help menu
Esc	stops the audio playback
Ctrl	stops the voice
TAB	moves forward through options
Shift +TAB	moves backwards through options

### Speech screen recommended settings

Sound effects – checked (space bar selects or deselects)  
Allow self-voicing – checked  
Arrow among voices slowly (use arrow keys)  
Speech rate slide – start slow  
Speech pitch slider – start around 65  
Speech volume slider – your choice  
Number of decimal places to voice  
TAB until you reach the heading

### Wave screen recommended settings

#### (left arrow from speech screen)

Data set volume – 50  
Play Y axis tick marks – unchecked  
Tick mark volume slider – 50  
Play noise below Y threshold – checked  
Y threshold value – 0  
Wave file length slider – 10  
Wave type – stereo  
Minimum frequency slider – 200  
Maximum frequency slider – 2500  
Auto-speak coordinates – optional  
TAB until you reach the heading

Static below the x-axis  
No static above the x-axis

With headphones, left ear for left of the y-axis,  
right ear for right of the y-axis

### Plot screen recommended settings

#### (left arrow from wave screen)

Source – Data Set 1  
Choose Plot Function  
Start – set at -10  
Finish – set at 10  
Number of points – 501 (<1000 use an odd #)  
Xmin – ignore  
Xmax – ignore  
Autoscale x-axis – checked  
Ymin – ignore  
Ymax – ignore  
Autoscale y-axis – checked  
Draw data points – checked  
Draw line through data – checked  
Draw error bars – unchecked  
Show x axis – checked  
Show y axis – checked  
Show x-axis labels – checked  
Show y-axis labels – checked  
Plot frame – tick marks or grid lines

#### Data Set 1 (arrow up from plot screen)

Tab to expression 1 box  
Type in the equation  
ENTER or F4 to calculate table

F3	Displays graph
Ctrl +F3	Hides the graph
F4	(Re)Evaluate expression
F5	Plays the audio graph
F6	Play the audio graph and beeps at tick marks
F7	Shrinks the graph
F8	Enlarges the graph
Alt +PgDn	Displays minimums
Alt +PgUp	Displays maximums
Alt +0	displays zeros (x-int)
Alt +I	displays intersection pts.
Alt +X	reads x-coordinate
Alt +Y	reads y-coordinate
Alt +right arrow	plays next data point
Alt +left arrow	plays previous data point
Alt +Home	goes to beginning of graph
Alt +End	goes to end of graph
Ctrl +P	prints the graph

## Notation List

Function	Syntax	Example
Times	*	3*4
Divide	/	3/4
Add	+	3+4
Subtract	-	3-4
Exponentiation	^	3^4
Sine	sin( )	sin(2.5)
Cosine	cos( )	cos(2.5)
Tangent	tan( )	tan(2.5)
ArcSine	asin( )	asin(0.5)
ArcCosine	acos( )	acos(0.5)
ArcTangent	atan( )	atan(0.5)
Hyperbolic Sine	hsin( )	hsin(0.5)
Hyperbolic Cosine	hcos( )	hcos(0.5)
Hyperbolic Tangent	htan( )	htan(0.5)
Hyperbolic ArcSine	hasin( )	hasin(0.5)
Hyperbolic ArcCosine	hacos( )	hacos(0.5)
Hyperbolic ArcTangent	hatan( )	hatan(0.5)
Square Root	sqrt( )	sqrt(4)
Factorial	!	5!
e to the x	exp( )	exp(-2.5)
Logarithm	log( )	log(3)
Natural Logarithm	ln( )	ln(2)
Absolute Value	abs( )	abs(-14)