BASIC SETUP

To enter a rational expression

\[
\frac{\text{numerator}}{\text{denominator}}
\]

To raise a value (or variable) to a power

\[x^2\]

To change a decimal to a fraction

FRAC

All values down the left-hand side should be highlighted.
To return to the 'home' screen at any time

2nd MODE

To access the VALUE/EVAL feature

STO

NOTE: Your x value must be within your viewing window.

From the Graph MORE MORE F1 MORE F2 MORE F3

This (or any multiple of x values) will give all x integer values.

To find or enter the absolute value

abs

This (or any multiple of x values) will give all x integer values.

2nd TRACE GRAPH

To find the intersection of 2 graphs (2 equations must be entered)

INTERSECT

NOTE: Your x value must be within your viewing window.

To change the viewing window for a graph

WINDOW

To access Pi

2nd X,T,θ,n

This (or any multiple of x values) will give all x integer values.

To graph an equation

Y= enter equation

GRAPH

To change an x-intercept(s) (an equation must be entered)

ZERO

To solve an equation by graphing

(2 equations must be entered)

GRAPH

2nd WINDOW Set start value (usually 0) and increment (usually 1). AUTO should be highlighted for both Indpnt and Depend

To access a TABLE

(2 or more equations must be entered)

TABLE

To adjust a TABLE

(2 or more equations must be entered)

TABLE
| To find $\sqrt{x}$ | 2nd $x^2$ value  
Note: You will need to enter ( ) when needed. | 2nd $x^2$ value  
Note: You will need to enter ( ) when needed. |
|-------------------|-------------------------------------------------|-------------------------------------------------|
| To find $\sqrt[3]{x}$ | MATH scroll to $\sqrt[3]{\text{value}}$  
Note: You will need to enter ( ) when needed. | 3 CUSTOM F# value  
Note: You will need to enter ( ) when needed. |
| To find other roots ($\sqrt[n]{y}$) | root MATH scroll to $\sqrt[n]{\text{value}}$  
Note: You will need to enter ( ) when needed. | $x$ value CUSTOM F# $y$ value  
Note: You will need to enter ( ) when needed. |
| To find the maximum (minimum) point  
(an equation must be entered.) | 2nd TRACE scroll to MAXIMUM (MINIMUM) ENTER Move cursor to LEFT of the point (the cursor may move up or down the graph) ENTER Move cursor to RIGHT of the point (the cursor may move up or down the graph) ENTER ENTER | From the graph MORE F1 F4 (F5) Move cursor to LEFT of the point (the cursor may move up or down the graph) ENTER Move cursor to RIGHT of the point (the cursor may move up or down the graph) ENTER ENTER |
| To solve inequalities in 2 variables  
(shading) | enter function into $y_1$ all the way to the left of $y_1$  
for $f(x) >$ ENTER ENTER GRAPH  
for $f(x) <$ ENTER ENTER ENTER GRAPH  
Repeat if solving a system of inequalities  
OR enter each function into $y_#$, select each style, then graph | for $f(x) >$ F3 F3 2nd F5  
for $f(x) <$ F3 F3 F3 2nd F5  
Repeat if solving a system of inequalities  
OR enter each function into $y_#$, select each style, then graph |
| To evaluate a function | an equation must be entered for $y_\#$  
VARS ► Y-VARS ENTER $y_\#$ ENTER (value) ENTER  
OR Use the Value feature from the graph | (an equation is not necessary for $y(x)$  
2nd + F1 expression, $x$-VAR, value) ENTER  
OR use EVAL feature from graph (an equation IS necessary for $y(x)$) |
| To access $i$ | 2nd $\bullet$ | The $i$ is not available, but you can enter complex expressions by value1 operation value2 $\sqrt{-1}$ ENTER The display is (value1, value2). Value 1 is the real part and Value2 is the imaginary part. |