

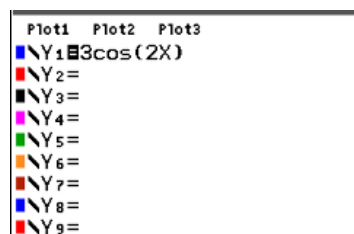
Chapter 12 / **Example 9**

Sketching trigonometric graphs

Sketch the graph of $y = 3\cos 2x$, $0 \leq x \leq 2\pi$.

Press $[f1]$ $[y=]$ to display the equation entry screen.

Type $3 \cos (2x)$ and press $[enter]$ to enter the equation as Y_1 .



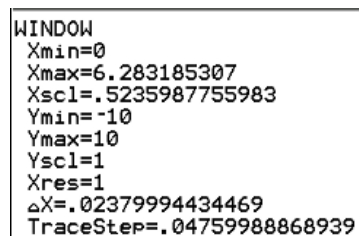
Plot1 Plot2 Plot3
 $Y_1 = 3\cos(2X)$
 $Y_2 =$
 $Y_3 =$
 $Y_4 =$
 $Y_5 =$
 $Y_6 =$
 $Y_7 =$
 $Y_8 =$
 $Y_9 =$

To change the axes to the domain $0 \leq x \leq 2\pi$ press $[f2]$ $[window]$ and set the axes so that

Set Xmin to 0, max to 2π and scale to $\pi / 6$

The GDC will convert these values to decimal form.

You can leave the other items as they are.



WINDOW
 Xmin=0
 Xmax=6.283185307
 Xscl=.5235987755983
 Ymin=-10
 Ymax=10
 Yscl=1
 Xres=1
 $\Delta X = .02379994434469$
 TraceStep=.04759988868939

Press $[f5]$ $[graph]$ when you have finished.

The GDC displays the graph for the domain $0 \leq x \leq 2\pi$.

