

Chapter 12 / **Example 9**

Sketching trigonometric graphs

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

Press **MENU** 5 **GRAPH** to display the equation entry screen.

Type 3 **COS** 2 x and close the parentheses.

Press **EXE**

Graph Func :Y=
Y1: 3cos 2x [—]
Y2: [—]
Y3: [—]
Y4: [—]
Y5: [—]
Y6: [—]
[SELECT] [DELETE] [TYPE] [TOOL] [MODIFY] [DRAW]

To change the axes to the domain $0 \leq x \leq 2\pi$ press **SHIFT** **F3** V-WIN.

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.

Press **EXIT** when you have finished.

View Window
Xmin : 0
max : 6.2831853
scale: 0.52359877
dot : 0.01662218
Ymin : -3.1
max : 3.1
[INITIAL] [TRIG] [STANDARD] [V-MEM] [SQUARE]

Press **F6** DRAW to display the graph screen.

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

