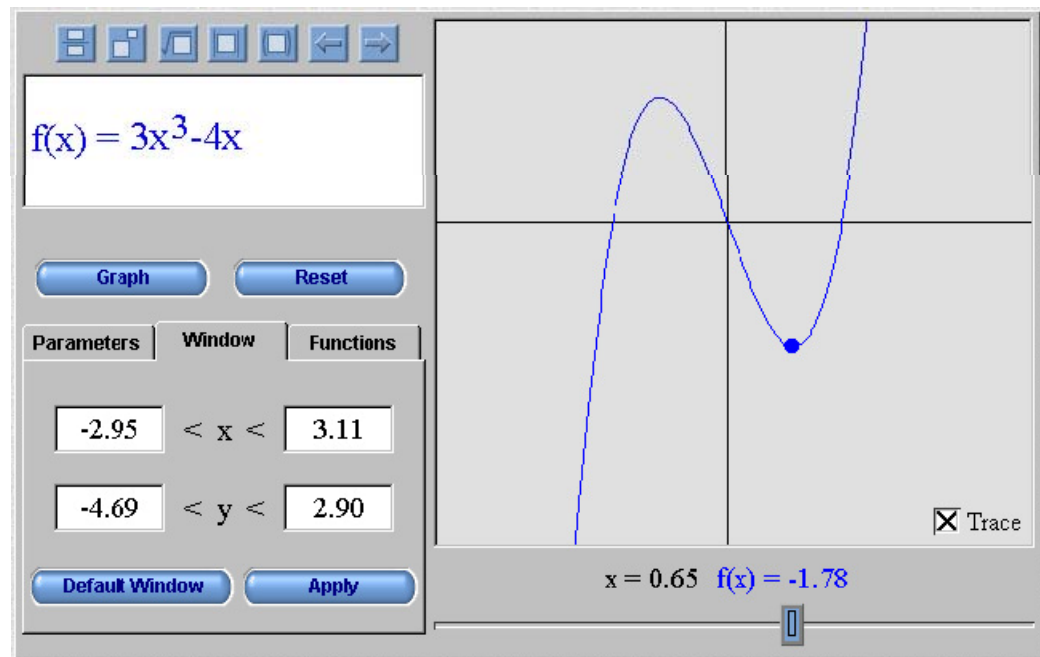Use the online graphing tool or your graphing calculator to determine the intervals for which the function $f(x) = 3x^3 - 4x$ is increasing.

- Online Grapher: http://matti.usu.edu/grapher/

Enter the function

$f(x) = 3x^3 - 4x$

f(x) = 3x³-4x

Graph   Reset

Parameters   Window   Functions

-2.95 < x < 3.11

-4.69 < y < 2.90

Default Window   Apply

☒ Trace

x = 0.65   f(x) = -1.78

- Now you see that the function is increasing for *x* less than *-.66 ,* decreasing from *-.66 to +.66* and is once again increasing for *x* greater than *+.66 .*