QT Iteration 3

(a) Complete the table of values for y = $x^3 - 5x - 8$

x	-3	-2	-1	0	1	2	3
y	-20			-8	-12		4

(b) On the grid, draw the graph of y = $x^3 - 5x - 8$

(c) Show that when f(x) = 0, the equation f(x) = $x^3 - 5x - 8$ can be rearranged to give $x = \sqrt[3]{5x + 8}$

(d) Use the iterative formula $x_{n+1} = \sqrt[3]{5x_n + 8}$ to find the real root of f(x) correct to 3 decimal places.