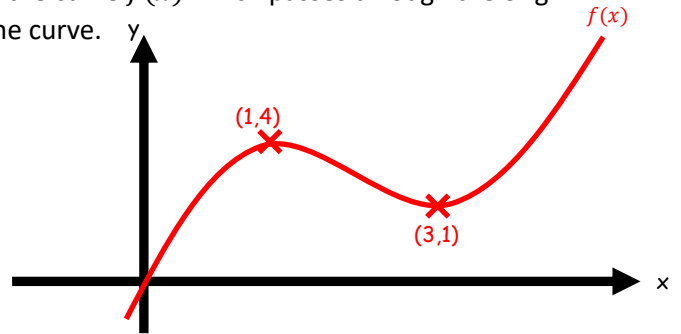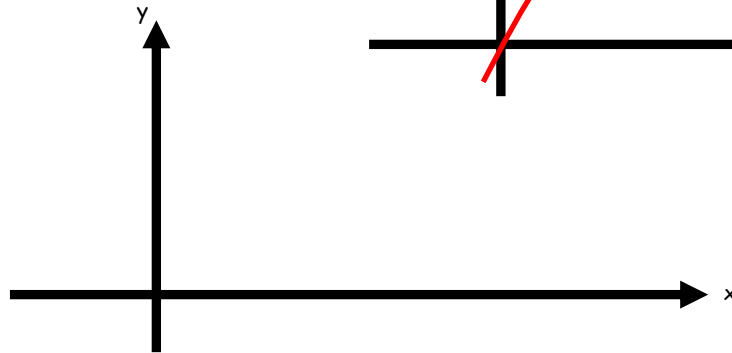# 4G Unfamiliar Functions

1. The diagram to the right shows a sketch of the curve $f(x)$ which passes through the origin. The points $A(1,4)$ and $B(3,1)$ also lie on the curve.

a) Sketch the graph of $y = f(x + 1)$

b) Sketch the graph of $y = f(x - 1)$

c) Sketch the graph of $y = f(x) - 4$

d) Sketch the graph of $2y = f(x)$