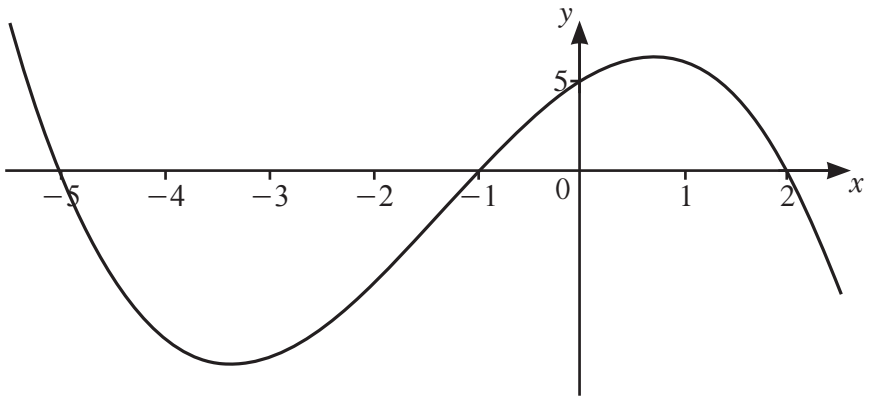
1 The curve $y = 2x^2 + k + 4$ intersects the straight line $y = (k+4)x$ at two distinct points. Find the possible values of k. [4]

2



The diagram shows the graph of $y = \mathrm{f}(x)$, where $\mathrm{f}(x)$ is a cubic polynomial.

(a) Find $\mathrm{f}(x)$. [3]

(b) Write down the values of x such that $\mathrm{f}(x) < 0$. [2]