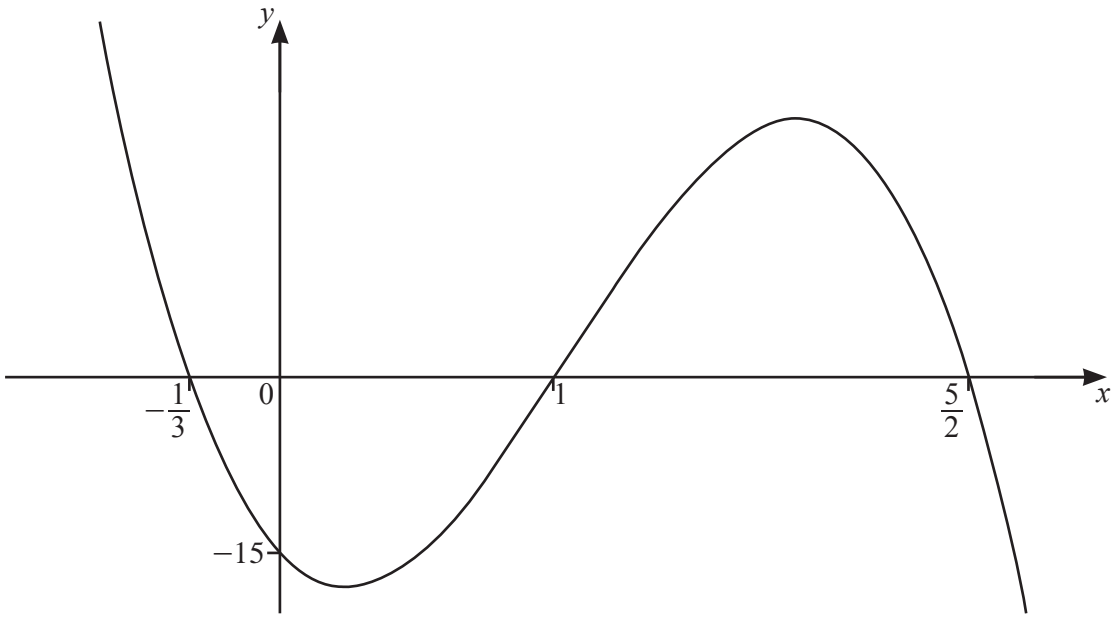
1



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

(a) Find an expression for $\mathrm{f}(x)$ in factorised form. Write each linear factor with its coefficients as integers. [3]

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

2 The function g is defined by $g(x) = 5\sin\frac{3x}{4} - 2$ for all values of x.

(a) Write down the amplitude of g. [1]

(b) Write down the period of g in degrees. [1]

(c) On the axes, sketch the graph of $y = g(x)$, for $-180° \leqslant x \leqslant 180°$. [3]

