2. The diagram shows the curve with equation \( y = f(x) \), where \( f(x) = kx(x + a)(x + b) \).

The curve passes through \((-1,0), (0,0), (1,2)\) and \((2,0)\).

Find the values of \(a\), \(b\) and \(k\).

Answers

\( a = 1, \quad b = -2, \quad c = -1 \)