

Advanced Higher Maths
SQA 2025 Paper 1
Question 6



On a suitable domain a curve is given by the equation $y = f(x)$, where

$$f(x) = \frac{x^2 + x + 5}{x - 2}.$$

- (a) Express $f(x)$ in the form $Ax + B + \frac{C}{x - 2}$, where A , B and C are constants. 2
- (b) State the equations of the vertical and non-vertical asymptotes of the curve. 2
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Answers:

(a) $x + 3 + \frac{11}{x - 2}$

(b) $y = x + 3$