Higher Maths
SQA 2023 Paper 1
Question 10

(a) Show that $(x+5)$ is a factor of $x^4+3x^3-7x^2+9x-30$. **2**

(b) Hence, or otherwise, solve $x^4+3x^3-7x^2+9x-30=0$, $x \in \mathbb{R}$. **5**

Answers:

(a) Use -5 in synthetic division, algebraic division or evaluation, to show that the remainder upon division by $(x+5)$ equals 0.

(b) $x=-5, x=2$