

Higher Maths
SQA 2018 Paper 2
Question 3



A function, f , is defined on the set of real numbers by $f(x) = x^3 - 7x - 6$.

Determine whether f is increasing or decreasing when $x = 2$.

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Answer:

Differentiate to obtain $f'(x)$.

Substitute to show that $f'(2) = 5 > 0$.

Conclude that f is increasing when $x = 2$.