

**Advanced Higher Maths**  
**SQA 2016 Specimen**  
**Question 1**



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Given  $f(x) = \frac{x-1}{1+x^2}$ , show that  $f'(x) = \frac{1+2x-x^2}{(1+x^2)^2}$ .

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3

Method:

Quotient rule.