## Higher Maths SQA 2019 Paper 2 Question 13



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For a function, f, defined on the set of real numbers,  $\mathbb{R}$ , it is known that

- the rate of change of f with respect to x is given by  $3x^2 16x + 11$
- the graph with equation y = f(x) crosses the x-axis at (7,0).

Express f(x) in terms of x.

Answer:

 $f(x) = x^3 - 8x^2 + 11x - 28$