



**MathsNET**

A joined up approach to  
teaching and learning  
mathematics

# Newton's second law

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- What does Newton's second law state?
- Give a formula that allows one to calculate the derivative  $\frac{df}{dx}$  of the function  $f(x)$  as a limit.
- By solving the limit that you wrote down in answer to the previous question show that the derivative of the function  $f(x) = x^3$  is equal to  $3x^2$ .