Calculus

International Baccalaureate · IB Diploma · Mathematics: Analysis and Approaches · SL · Vocabulary in context

Word	Example
secant /ˈsiːkənt/	A **secant** cuts a circle at two points.
tangent /ˈtændʒənt/	Draw a **tangent** to the curve to find the gradient at one point.
derivative /dɪˈrɪvətɪv/	Use the **derivative** to find the curve's slope at this point.
normal /ˈnɔːml/	The **normal** is a line at 90° to the surface. 90°
chain rule /tʃeɪn ruːl/	Use the **chain rule** for a function inside another function.
product rule /ˈprɒdʌkt ruːl/	Use the **product rule** to differentiate x · sin x. x · sin x
quotient rule /ˈkwəʊʃənt ruːl/	Use the **quotient rule** to differentiate sin x / x. sin x / x
second derivative /ˈsekənd dɪˈrɪvətɪv/	The **second derivative** tells us how the gradient changes.
stationary point /ˈsteɪʃənəri pɔɪnt/	The tangent is horizontal at a **stationary point**.
point of inflection /pɔɪnt ɒv ɪnˈflekʃn/	At a **point of inflection**, the curve changes from bending one way to the other.
displacement /dɪˈspleɪsmənt/	After walking 3 km east, your **displacement** is 3 km east. 3 km 3 km
velocity /vəˈlɒsɪti/	The ball's **velocity** is 5 m/s to the left. 5 m/s

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∑ **integration** /ˌɪntɪˈgreɪʃn/	The NMR **integration** shows three hydrogens in this peak. NMR
∞ **indefinite integral** /ɪnˈdefɪnət ˈɪntɪgrəl/	An **indefinite integral** always includes a constant of integration, + c. + c
[ ] **definite integral** /ˈdefɪnət ˈɪntɪgrəl/	A **definite integral** has limits and gives a number, such as an area.

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