

CLASS 12

MATHEMATICS

REVISION NOTES

Class 12 Mathematics Chapter 6 Applications of Derivatives – Revision Notes

Quick revision notes for Class 12 Maths Chapter 6 (Applications of Derivatives). These Class 12 Mathematics Chapter 6 notes are ideal for quick revision just before exams.

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Quick revision notes for Class 12 Maths Chapter 6 (Applications of Derivatives). These Class 12 Mathematics Chapter 6 notes are ideal for quick revision just before exams.

Key Concepts

Rate of change: dy/dx as instantaneous rate.

Increasing: $f'(x) \geq 0$; decreasing: $f'(x) \leq 0$.

Tangent: $y - y_0 = f'(x_0)(x - x_0)$; Normal slope $= -1/f'(x_0)$.

Approximation & Extrema

$\Delta y \approx f'(x)\Delta x$ (differentials).

Critical points: $f'(x) = 0$.

Second derivative test: $f'' < 0 \Rightarrow$ local max; $f'' > 0 \Rightarrow$ local min.

Absolute extrema on $[a, b]$: compare critical points and endpoints.

One-Line Summary

Derivatives model rates of change, define tangents/normals, and identify increasing/decreasing behaviour and local/absolute extrema via first and second derivative tests.

Class 12 Mathematics Chapter 6 – Solutions and Important Questions

Need full answers or more practice? See the [Class 12 Mathematics Chapter 6 Solutions](#) and [Class 12 Mathematics Chapter 6 Extra Questions](#).

See also: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#) | [Chapter 4](#) | [Chapter 5](#) | [Chapter 6](#)

Practice more: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#) | [Chapter 4](#) | [Chapter 5](#) | [Chapter 6](#)

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