Factsheet: List of derivatives

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Summary

A list of common (and some uncommon) derivatives of functions.

Throughout, are real numbers.

## Derivatives of polynomial, exponential and logarithmic functions

| function | derivative w.r.t | notes |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | constant |
|  |  | constant |

## Derivatives of trigonometric functions

| function | derivative w.r.t |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Derivatives of inverse trigonometric functions

| function | derivative w.r.t | notes |
| --- | --- | --- |
|  |  | valid for |
|  |  | valid for |
|  |  | valid for |
|  |  | valid for |
|  |  | valid for |
|  |  | valid for |

## Derivatives of hyperbolic functions

| function | derivative w.r.t |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Derivatives of inverse hyperbolic functions

Throughout, are real numbers.

| function | derivative w.r.t | notes |
| --- | --- | --- |
|  |  |  |
|  |  | positive |
|  |  |  |
|  |  |  |
|  |  | positive |
|  |  |  |

# Further reading

For more about where these came from, please see [Guide: Introduction to differentiation and the derivative](../studyguides/introtodifferentiation.qmd) and [Proof sheet: Derivatives of other common functions].

## Version history

v1.0: created in 08/25 by tdhc.

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