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| **Table of Derivatives** |
| **(**[**Math**](http://www.math.com/tables/tables.htm)**|**[**Calculus**](http://www.math.com/tables/calculus.htm)**|**[**Derivatives**](http://www.math.com/tables/derivatives.htm)**| Table Of)** |

Power of x.

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| http://www.math.com/tables/d-dx.gif c = 0 | http://www.math.com/tables/d-dx.gif x = 1 | http://www.math.com/tables/d-dx.gif xn = n x(n-1)  [Proof](http://www.math.com/tables/derivatives/more/x%5En.htm) |

Exponential / Logarithmic

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| http://www.math.com/tables/d-dx.gif ex = ex  [Proof](http://www.math.com/tables/derivatives/more/e%5Ex.htm) | http://www.math.com/tables/d-dx.gif bx = bx ln(b)  [Proof](http://www.math.com/tables/derivatives/more/b%5Ex.htm) | http://www.math.com/tables/d-dx.gif ln(x) = 1/x  [Proof](http://www.math.com/tables/derivatives/more/ln.htm) |

Trigonometric

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| http://www.math.com/tables/d-dx.gif sin x = cos x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#sin) | http://www.math.com/tables/d-dx.gif csc x = -csc x cot x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#reciprocals) |
| http://www.math.com/tables/d-dx.gif cos x = - sin x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#cos) | http://www.math.com/tables/d-dx.gif sec x = sec x tan x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#reciprocals) |
| http://www.math.com/tables/d-dx.gif tan x = sec2 x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#tan) | http://www.math.com/tables/d-dx.gif cot x = - csc2 x  [Proof](http://www.math.com/tables/derivatives/more/trig.htm#reciprocals) |

Inverse Trigonometric

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| http://www.math.com/tables/d-dx.gif arcsin x  =  | 1 sqrt(1 - x2) |

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| http://www.math.com/tables/d-dx.gif arccsc x =  | -1 |x| sqrt(x2 - 1) |

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| http://www.math.com/tables/d-dx.gif arccos x =  |  -1 sqrt(1 - x2) |

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| http://www.math.com/tables/d-dx.gif arcsec x =  | 1 |x| sqrt(x2 - 1) |

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| http://www.math.com/tables/d-dx.gif arctan x =  | 1 1 + x2 |

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| http://www.math.com/tables/d-dx.gif arccot x =  | -1 1 + x2 |

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Hyperbolic

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| http://www.math.com/tables/d-dx.gif sinh x = cosh x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#sinh) | http://www.math.com/tables/d-dx.gif csch x = - coth x csch x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#csch) |
| http://www.math.com/tables/d-dx.gif cosh x = sinh x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#cosh) | http://www.math.com/tables/d-dx.gif sech x = - tanh x sech x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#csch) |
| http://www.math.com/tables/d-dx.gif tanh x = 1 - tanh2 x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#tanh) | http://www.math.com/tables/d-dx.gif coth  x = 1 - coth2 x  [Proof](http://www.math.com/tables/derivatives/more/hyperbolics.htm#csch) |

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