

1. $y = a$	$y' = 0$
2. $y = a \cdot x^n$	$y' = n \cdot a \cdot x^{n-1}$
3. $y = (f)^n$	$y' = n \cdot (f)^{n-1} \cdot f'$
4. $y = L(x)$	$y' = \frac{1}{x}$
5. $y = L(f)$	$y' = \frac{f'}{f}$
6. $y = \log_a(x)$	$y' = \frac{1}{x} \cdot \log_a(e)$
7. $y = \log_a(f)$	$y' = \frac{f'}{f} \cdot \log_a(e)$
8. $y = a^x$	$y' = a^x \cdot L(a)$
9. $y = a^f$	$y' = f' \cdot a^f \cdot L(a)$
10. $y = e^x$	$y' = e^x$
11. $y = e^f$	$y' = f' \cdot e^f$
12. $y = \sqrt[n]{f}$	$y' = \frac{f'}{n \cdot \sqrt[n]{(f)^{n-1}}}$
13. $y = f \cdot g$	$y' = f' \cdot g + g' \cdot f$
14. $y = \frac{f}{g}$	$y' = \frac{f' \cdot g - g' \cdot f}{g^2}$
15. $y = \text{sen}x$	$y' = \cos x$
16. $y = \text{sen}(f)$	$y' = f' \cdot \cos(f)$
17. $y = \text{sen}^n(f)$	$y' = n \cdot \text{sen}^{n-1}(f) \cdot f' \cdot \cos(f)$
18. $y = \text{cos}x$	$y' = -\text{sen}x$
19. $y = \text{cos}(f)$	$y' = -f' \cdot \text{sen}(f)$
20. $y = \text{cos}^n(f)$	$y' = -n \cdot \text{cos}^{n-1}(f) \cdot f' \cdot \text{sen}(f)$
21. $y = \text{tg}x$	$y' = \frac{1}{\cos^2 x} = 1 + \text{tg}^2 x$
22. $y = \text{tg}(f)$	$y' = \frac{f'}{\cos^2(f)} = f' \cdot [1 + \text{tg}^2(f)]$
23. $y = \text{tg}^n(f)$	$y' = n \cdot \text{tg}^{n-1}(f) \cdot \frac{f'}{\cos^2(f)}$
24. $y = \text{cot} gx$	$y' = \frac{-1}{\text{sen}^2 x} = -(1 + \text{cot}^2 x)$
25. $y = \text{cot} g(f)$	$y' = \frac{-f'}{\text{sen}^2(f)}$
26. $y = \text{cot} g^n(f)$	$y' = -n \cdot \text{cot} g^{n-1}(f) \cdot \frac{f'}{\text{sen}^2(f)}$

27. $y = \text{sec} x$	$y' = \text{sec} x \cdot \text{tg}x$
28. $y = \text{sec}(f)$	$y' = f' \cdot \text{sec}(f) \cdot \text{tg}(f)$
29. $y = \text{cosec}x$	$y' = -\text{cosec}x \cdot \text{cot} gx$
30. $y = \text{cosec}(f)$	$y' = -f' \cdot \text{cosec}(f) \cdot \text{cot} g(f)$
31. $y = \text{arcsen}x$	$y' = \frac{1}{\sqrt{1-x^2}}$
32. $y = \text{arcsen}(f)$	$y' = \frac{f'}{\sqrt{1-(f)^2}}$
33. $y = \text{arccos}x$	$y' = \frac{-1}{\sqrt{1-x^2}}$
34. $y = \text{arccos}(f)$	$y' = \frac{-f'}{\sqrt{1-(f)^2}}$
35. $y = \text{arctg}x$	$y' = \frac{1}{1+x^2}$
36. $y = \text{arctg}(f)$	$y' = \frac{f'}{1+(f)^2}$
37. $y = \text{arc cot} gx$	$y' = \frac{-1}{1+x^2}$
38. $y = \text{arc cot} g(f)$	$y' = \frac{-f'}{1+(f)^2}$
39. $y = \text{arc sec}x$	$y' = \frac{1}{ x  \cdot \sqrt{x^2-1}}$
40. $y = \text{arc sec}(f)$	$y' = \frac{f'}{ f  \cdot \sqrt{(f)^2-1}}$
41. $y = \text{arccosec}x$	$y' = \frac{-1}{ x  \cdot \sqrt{x^2-1}}$
42. $y = \text{arccosec}(f)$	$y' = \frac{-f'}{ f  \cdot \sqrt{(f)^2-1}}$

43. **Derivación logarítmica:**  $y = (f)^g$

1º) Tomar **L** (logaritmos neperianos) en ambos miembros: **Ly = g · Lf.**

2º) Derivar en ambos miembros:

$$\frac{y'}{y} = g' \cdot Lf + g \cdot \frac{f'}{f}$$

3º) Despejar **y'** de la expresión anterior:

$$y' = \left( g' \cdot Lf + g \cdot \frac{f'}{f} \right) \cdot (f)^g$$