

SIMPLES	COMPUESTAS
1. $y = k$ $y' = 0$	
2. $y = kx$ $y' = k$	
3. $y = x^n$ $y' = nx^{n-1}$	4. $y = f^n$ $y' = nf^{n-1}$
5. $y = f \cdot g$ $y' = f' \cdot g + f \cdot g'$	6. $y = \frac{f}{g}$ $y' = \frac{f' \cdot g - f \cdot g'}{g^2}$
7. $y = \sqrt[n]{x}$ $y' = \frac{1}{n \cdot \sqrt[n]{x^{n-1}}}$	8. $y = \sqrt[n]{f}$ $y' = \frac{f'}{n \cdot \sqrt[n]{f^{n-1}}}$
9. $y = \ln x$ $y' = \frac{1}{x}$	10. $y = \ln f$ $y' = \frac{f'}{f}$
11. $y = \log_a x$ $y' = \frac{1}{x} \log_a e$	12. $y = \log_a f$ $y' = \frac{f'}{f} \log_a e$
13. $y = e^x$ $y' = e^x$	14. $y = e^f$ $y' = f' \cdot e^f$
15. $y = a^x$ $y' = a^x \ln a$	16. $y = a^f$ $y' = f' \cdot a^f \ln a$
17. $y = \operatorname{sen} x$ $y' = \operatorname{cos} x$	18. $y = \operatorname{sen} f$ $y' = f' \cdot \operatorname{cos} f$
19. $y = \operatorname{cos} x$ $y' = -\operatorname{sen} x$	20. $y = \operatorname{cos} f$ $y' = -f' \operatorname{sen} f$
21. $y = \operatorname{tg} x$ $y' = \frac{1}{\operatorname{cos}^2 x} = \sec^2 x = 1 + \operatorname{tg}^2 x$	22. $y = \operatorname{tg} f$ $y' = \frac{f'}{\operatorname{cos}^2 f} = f' \cdot \sec^2 x$ $= (1 + \operatorname{tg}^2 x) \cdot f'$
23. $y = \operatorname{sec} x$ $y' = \operatorname{sec} x \cdot \operatorname{tg} x$	24. $y = \operatorname{sec} f$ $y' = f' \cdot \operatorname{sec} f \cdot \operatorname{tg} f$
25. $y = \operatorname{cosec} x$ $y' = -\operatorname{cosec} x \cdot \operatorname{cotg} x$	26. $y = \operatorname{cosec} f$ $y' = -f' \cdot \operatorname{cosec} f \cdot \operatorname{cotg} f$
27. $y = \operatorname{cotg} x$ $y' = \frac{-1}{\operatorname{sen}^2 x} = -\operatorname{cosec}^2 x = -1 - \operatorname{cotg}^2 x$	28. $y = \operatorname{cotg} f$ $y' = \frac{-f'}{\operatorname{sen}^2 f} = -f' \operatorname{cosec}^2 f = (-1 - \operatorname{cotg}^2 f) \cdot f'$
29. $y = \operatorname{arcsen} x$ $y' = \frac{1}{\sqrt{1-x^2}}$	30. $y = \operatorname{arcsen} f$ $y' = \frac{f'}{\sqrt{1-f^2}}$
31. $y = \operatorname{arccos} x$ $y' = \frac{-1}{\sqrt{1-x^2}}$	32. $y = \operatorname{arccos} f$ $y' = \frac{-f'}{\sqrt{1-f^2}}$
33. $y = \operatorname{arctg} x$ $y' = \frac{1}{1+x^2}$	34. $y = \operatorname{arctg} f$ $y' = \frac{f'}{1+f^2}$
35. $y = \operatorname{arccotg} x$ $y' = \frac{-1}{1+x^2}$	36. $y = \operatorname{arccotg} f$ $y' = \frac{-f'}{1+f^2}$
	37. $y = f^g$ Por derivación logarítmica