

DERIVADAS

EJERCICIO	SOLUCIÓN
1. $y = 3x^5 - 4x^3 - 4$	
2. $y = x + \ln x$	
3. $y = 2x^2 - e^2$	
4. $y = xe^x$	
5. $y = x\sqrt{x}$	
6. $y = \frac{x+2}{x-2}$	
7. $y = \frac{\ln x}{e^x}$	
8. $y = e^{2x} + \frac{2}{x}$	
9. $y = (2x + 1)^3$	
10. $y = 2^{2x}$	
11. $y = e^{2-3x}$	
12. $y = (2x - 1)e^{2x-1}$	
13. $y = \sqrt{2x - 1}$	
14. $y = \ln(x^2 - 2)$	
15. $y = x^2(2x - 1)^3$	
16. $y = \frac{e^x}{x+1}$	
17. $y = \frac{x^2-1}{\sqrt{x-1}}$	
18. $y = \ln \frac{x^2}{x+1}$	
19. $y = \frac{e^{5x}}{x^3-1}$	
20. $y = 4x \cdot \ln(3x + 1)$	
21. $y = (x^2 - 1)(x^3 + 2x)$	
22. $y = \frac{e^{2x+1}}{(x-1)^2}$	
23. $y = \ln \frac{x}{x+1}$	
24. $y = \frac{3x-1}{x} - (5x - x^2)^2$	





25. $y = (x^2 - 1)\ln(x)$	
26. $y = 2^{5x}$	
27. $y = (x^3 - 6x)(x^2 + 1)^3$	
28. $y = (x + 1)e^{2x+1}$	
29. $y = \frac{\ln x}{x^2}$	
30. $y = (1 - x^3) \cos x$	
31. $y = 2x^3 - 3x^2 + 2$	
32. $y = \frac{2}{3}x^3 - \frac{1}{2}x^2 + 2$	
33. $y = x^2 - \ln x + e^x$	
34. $y = x^2 e^{2x}$	
35. $y = \frac{(x+1)^2}{x^2-2}$	
36. $y = 4x^3 - 5x + \frac{1}{e^x}$	
37. $y = \frac{e^x}{7x^5-4}$	
38. $y = \sqrt{2^{2x+1}}$	
39. $y = \sqrt{\sin x}$	
40. $y = \sin(x^2 + 2)$	
41. $y = \sin^2 3x$	
42. $y = \cos\left(\frac{x}{x-2}\right)$	
43. $y = \frac{\cos x}{\sqrt{x}}$	
44. $y = \sin 2x \cdot \cos 3x$	
45. $y = \operatorname{ctg}(x + 1)^2$	
46. $y = \cos \ln 2x$	
47. $y = \ln \sqrt{\cos x}$	
48. $y = 2^{x \cdot \cos 2x}$	
49. $y = \tan(2^{\ln x})$	
50. $y = \arccos e^x$	

51. $y = \arcsen \sqrt{2x}$	
52. $y = \arctan \sqrt{x}$	



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