## Resultados

Encuentra todas las derivadas resueltas a continuación:

1	f(x) = 0	$\mathbf{f}'(\mathbf{x}) = 0$
2	$\mathbf{f}(\mathbf{x}) = -7$	$\mathbf{f}'(\mathbf{x}) = 0$
3	f(x) = -7x	f '(x) =-7
4	f(x) = -5x + 2	f '(x) =-5
5	$\mathbf{f}(\mathbf{x}) = \mathbf{x}^5 - \mathbf{x}^3 + 3$	$f'(x) = 5x^4 - 3x^2$
6	$\mathbf{f}(\mathbf{x}) = 2\mathbf{x}^7 - 3\mathbf{x}^6 + 3\ \mathbf{x}^3 - 4\mathbf{x}^2 - 7$	$f'(x) = 14x^6 - 18x^{5+}9x^2 - 8x$
	$\mathbf{f}(\mathbf{x}) = \mathbf{x} - 3$	$f(x) = \frac{x}{2} - \frac{3}{2}$
7	$\mathbf{f}(\mathbf{x}) = \frac{x-3}{2}$	$\mathbf{f}'(\mathbf{x}) = \frac{1}{2}$
	$\mathbf{f}(\mathbf{x}) = -\frac{x^3 + x - 1}{2}$	$f(x) = -\frac{x^{3}}{2} - \frac{x}{2} + \frac{1}{2}$
$8 \qquad   \mathbf{I}(\mathbf{x}) = -\frac{x}{2} $	$\frac{1}{2}$	$f'(x) = -\frac{3x^2}{2} - \frac{1}{2}$
9	$\mathbf{f}(\mathbf{x}) = -\frac{3}{2}x^3 + \frac{2}{5}x^2 - 4$	$f'(x) = -\frac{9}{2}x^2 + \frac{4}{5}x$
	$\mathbf{f}(\mathbf{x}) = \frac{3}{x^2}$	$f(x) = 3.x^{-2}$
10	$\mathbf{f}'(\mathbf{x}) =$	$f'(x) = -6x^{-3} = \frac{-6}{x^3}$
		$f(x) = -2. x^{-3} + 3.x^{-2} - 4x$
11	$f(x) = -\frac{2}{x^3} + \frac{3}{x^2} - 4x$	$f'(x) = +6. x^{-4}-6.x^{-3}-4$
- <b>-</b>		$f'(x) = \frac{6}{x^4} - \frac{6}{x^3} - 4$

		$f(x) = \frac{(x+1)(x-1)}{(x+1)(x+1)}$ $f(x) = \frac{(x-1)}{(x+1)}$
		$f(x) = \frac{(x-1)}{(x+1)}$
12	$\mathbf{f}(\mathbf{x}) = \frac{x^2 - 1}{(x+1)^2}$	$f'(x) = \frac{(x-1)' \cdot .(x+1) \cdot -(x-1) \cdot .(x+1)'}{(x+1)^2}$
		$f'(x) = \frac{(x+1)^{-}(x-1)}{(x+1)^2} = \frac{x+1-x+1}{(x+1)^2} = \frac{2}{(x+1)^2}$ $f'(x) = \frac{2}{(x+1)^2}$
		$f(x) = +5\frac{x^{4}}{x^{5}} - 3\frac{x^{3}}{x^{5}}$ $f'(x) = +5x^{4-5} - 3x^{3-5}$ $f(x) = +5x^{-1} - 3x^{-2}$ $f'(x) = -5x^{-2} + 6x^{-3}$ $f'(x) = -\frac{5}{x^{2}} + \frac{6}{x^{3}}$
		$f'(x) = +5x^{4-5}-3x^{3-5}$
13	$\mathbf{f}(\mathbf{x}) = \frac{5x^4 - 3x^3}{\mathbf{x}5}$	$f(x) = +5x^{-1}-3x^{-2}$
		$f'(x) = -5x^{-2} + 6x^{-3}$
		$f(x) = x^{\frac{3}{2}}$
		$f'(x) = \frac{3}{2}x_{\frac{2}{2}}^{3} - \frac{2}{2}$
14	$\mathbf{f}(\mathbf{x}) = \sqrt{x^3}$	$f(x) = x^{\frac{3}{2}}$ $f'(x) = \frac{3}{2}x^{\frac{3}{2}} - \frac{2}{2}$ $f'(x) = \frac{3}{2}x^{\frac{1}{2}}$ $f'(x) = \frac{3}{2}\sqrt[2]{x}$
		$\mathbf{f}'(\mathbf{x}) = \frac{3}{2} \sqrt[2]{x}$
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15	$\mathbf{f}(\mathbf{x}) = \frac{1}{\sqrt{x^3}}$	$f(x) = \frac{1}{\frac{3}{x^2}}$ $f(x) = x^{-\frac{3}{2}}$ $f'(x) = -\frac{3}{2}x^{-\frac{3}{2}} - \frac{2}{2}$ $f'(x) = -\frac{3}{2}x^{-\frac{5}{2}}$ $f'(x) = -\frac{3}{2}\frac{1}{2\sqrt{x^5}}$ $f'(x) = -\frac{3}{2}\frac{1}{x^2\sqrt{x}}$
16	$\mathbf{f}(\mathbf{x}) = \sqrt{x^3} - \sqrt[3]{x^5}$	$f(x) = x^{\frac{3}{2}} - x^{\frac{5}{3}}$ $f'(x) = \frac{3}{2} \cdot x^{\frac{3}{2} - \frac{5}{3}} x^{\frac{5}{3} - \frac{3}{3}}$ $f'(x) = \frac{3}{2} \cdot x^{\frac{1}{2}} - \frac{5}{3} x^{\frac{2}{3}}$ $f'(x) = \frac{3}{2} \cdot \sqrt{x} - \frac{5}{3} \sqrt[3]{x^2}$
17	$\mathbf{f}(\mathbf{x}) = -3\sqrt{x} - 2\sqrt[3]{x^2}$	$f(x) = -3x^{\frac{1}{2}} - 2x^{\frac{2}{3}}$ $f'(x) = -\frac{3}{2}x^{\frac{1}{2}} - \frac{4}{3}x^{\frac{2}{3}} - \frac{4}{3}x^{\frac{2}{3}}$ $f'(x) = -\frac{3}{2}x^{\frac{1}{2}} - \frac{4}{3}x^{\frac{1}{3}}$ $f'(x) = \frac{-3}{2\sqrt{x}} - \frac{4}{3\sqrt[3]{x}}$

18	$\mathbf{f}(\mathbf{x}) = -\frac{2}{3}\sqrt{x^3} - \sqrt{15x} - $	$f(x) = -\frac{2}{3}x_{2} - \frac{1}{152}x_{2} - x_{3}$ $f'(x) = -\frac{2}{3} \cdot \frac{3}{2}x_{2}^{\frac{3}{2}} - \sqrt{15} \cdot \frac{1}{2}x_{2}^{\frac{1}{2}} - \frac{5}{3}x_{3}^{\frac{5}{3}}$ $f'(x) = -x_{2}^{\frac{1}{2}} - \sqrt{15} \cdot \frac{5}{3}x_{2}^{\frac{1}{2}} - x_{3}^{\frac{2}{3}}$ $f'(x) = -\sqrt{x} - \frac{\sqrt{15}}{2\sqrt{x}} - \frac{5}{3}\sqrt[3]{x^{2}}$
19	$\mathbf{f}(\mathbf{x}) = -\frac{3}{2}\sqrt{x^3} - 2x^5 - 5x^2$	$f(x) = -\frac{3}{2} x^{\frac{3}{2}} - 2x^{5} - 5x^{2}$ $f'(x) = -\frac{3}{2} \cdot \frac{3}{2} x^{\frac{1}{2}} - 10x^{4} - 10x$ $f'(x) = -\frac{9}{4} \sqrt{x} - 10x^{4} - 10x$
20	$\mathbf{f}(\mathbf{x}) = \frac{\sqrt{x} \sqrt{x}}{\sqrt{2}\sqrt{x}}$	$\mathbf{f}(\mathbf{x}) = \frac{\sqrt{\frac{3}{x}\sqrt{x}}}{2\sqrt{x}} = \frac{\frac{1}{x^{2}.x^{3}}}{\frac{1}{x^{2}}} = \frac{\frac{1}{x^{2}} \cdot \frac{1}{3}}{\frac{1}{x^{2}}} = \frac{\frac{5}{x^{6}}}{\frac{1}{x^{2}}}$ $\mathbf{f}(\mathbf{x}) = \frac{5}{x} \cdot \frac{1}{x^{2}} = \frac{2}{x} \cdot x \cdot \frac{2}{3}$ $\mathbf{f}'(\mathbf{x}) = \frac{1}{3\sqrt[3]{x^{2}}}$ $\mathbf{f}'(\mathbf{x}) = \frac{1}{3\sqrt[3]{x^{2}}}$

21	$\mathbf{f}(\mathbf{x}) = \frac{2\sqrt{x} + \sqrt{x}}{2\sqrt{x}}$	$f(x) = \frac{2\sqrt{x} + \sqrt[3]{x}}{2\sqrt{x}} = \frac{2\sqrt{x}}{2\sqrt{x}} + \frac{\sqrt[3]{x}}{2\sqrt{x}}$ $f(x) = \frac{2x^{\frac{1}{2}}}{1} + \frac{x^{\frac{1}{3}}}{1}}{x^{2}}$ $f(x) = 2 + x^{-\frac{1}{u}}$ $f'(x) = -\frac{1}{t}x^{-\frac{v}{u}}$ $f'(x) = -\frac{1}{6x^{6}\sqrt{x}}$
22	$\mathbf{f}(\mathbf{x}) = \left(x^5 - x^3 + 3\right)^4$	$f'(x) = 4.(x^5 - x^3 + 3)^3.(5x^4 - 3x^2)$
23	$\mathbf{f}(\mathbf{x}) = (x^2 - 2)^2$	f'(x) =2. (x <sup>2</sup> - 2). (2x) f'(x) = 4x. (x <sup>2</sup> -2) f'(x) = $4x^3 - 8x$
24	$f(x) = (x - 1). (x + 1)^2$	f'(x) = $(x + 1)^2 + (x-1) \cdot 2 \cdot (x + 1)$ f'(x) = $x^2 + 2x + 1 + 2x^2 - 2$ f'(x) = $3x^2 + 2x - 1$
25	$\mathbf{f}(\mathbf{x}) = \left(x^5 - x^3 + 3\right)^4$	$\mathbf{f}(\mathbf{x}) = (x^5 - x^3 + 3)^4$ $\mathbf{f}'(\mathbf{x}) = 4 \cdot (x^5 - x^3 + 3)^3 \cdot (5x^4 - 3x^2)$

		$f(x) = ((x^5 - x^3 + 3))^{\frac{1}{2}}$
26	$\mathbf{f}(\mathbf{x}) = \sqrt{\left(\left(x^5 - x^3 + 3\right)\right)}$	$f'(x) = \frac{1}{2} ((x^5 - x^3 + 3))^{\frac{1}{2}} (5x^4 - 3x^2)$
		$\mathbf{f}'(\mathbf{x}) = \frac{(5x^4 - 3x^2)}{2.\sqrt{x^5 - x^3 + 3}}$
		$f(x) = ((x^5 - x^3 + 3))^{\frac{1}{5}}$
27	$\mathbf{f}(\mathbf{x}) = \sqrt[5]{x^5 - x^3 + 3}$	$f'(x) = \frac{1}{5} \left( \left( x^5 - x^3 + 3 \right) \right)^{-\frac{4}{5}} \cdot \left( 5x^4 - 3x^2 \right)$
		$\mathbf{f}'(\mathbf{x}) = \frac{(5x^4 - 3x^2)}{5 \cdot \sqrt[5]{(x^5 - x^3 + 3)^4}}$
		$f(x) = ((x^5 - x^3 + 3))^{-\frac{1}{5}}$
	$\mathbf{f}(\mathbf{x}) = \frac{5}{\sqrt{5}} \frac{1}{\sqrt{3+3}}$	$f'(x) = -\frac{1}{5} ((x^5 - x^3 + 3))^{-\frac{u}{5}} . (5x^4 - 3x^2)$
28	V	f '(x)
		$= -\frac{(5x^4 - 3x^2)}{5 \cdot \sqrt[5]{(x^5 - x^3 + 3)^6}} = -\frac{(5x^4 - 3x^2)}{5 \cdot (x^5 - x^3 + 3)^5 \sqrt{(x^5 - x^3 + 3)^5}}$

29	$\mathbf{f}(\mathbf{x}) = \sqrt[3]{\frac{\mathbf{x} \cdot 5 - \mathbf{x} \cdot 3 + 3}{x^2}}$	$f(x) = \left(\left(\frac{x5 - x3 + 3}{x^2}\right)\right)^{\frac{1}{3}}$ $f'(x)$ $= \frac{1}{3\sqrt[3]{\frac{x5 - x3s3}{x^2}}^2} \cdot \frac{(5 \cdot x^4 - 3x^2)x^2 - x(5 - x3 + 3)2x}{x^4}$ $= \frac{1}{3\sqrt[3]{\left(\frac{x5 - x3s3}{x^2}\right)^2} \cdot \frac{(3 \cdot x^5 - x^3 - 6)}{x^3}$
30	$\mathbf{f}(\mathbf{x}) = \sqrt[5]{\frac{x^2 + x}{x + 1}}$	$f(x) = \sqrt[5]{\frac{x^2 + x}{x + 1}} = \sqrt[5]{\frac{x \cdot (x + 1)}{x + 1}} = \sqrt[5]{x}$ $f'(x) = \frac{1}{5\sqrt[5]{x^4}}$
31	$f(x) = \sqrt{\frac{x^2 + 2x + 1}{x^2 - 1}}$	$f(x) = \sqrt{\frac{x^2 + 2x + 1}{x^2 - 1}} = \sqrt{\frac{(x+1) \cdot (x+1)}{(x+1) \cdot (x-1)}} = \sqrt{\frac{(x+1)}{(x-1)}}$ $f'(x) = \frac{1}{2\sqrt{\frac{(xs1)}{(x-1)}}} \frac{x - 1 - x - 1}{(x-1)^2} - \frac{1}{\sqrt{\frac{(xs1)}{(x-1)}}} \frac{1}{(x-1)^2} - \frac{1}{\sqrt{x^2 - 1}}$ $\frac{1}{(x-1)}$ $f'(x) = \frac{-1}{\sqrt{x^2 - 1} \cdot (x-1)}$

32	$\mathbf{f}(\mathbf{x}) = \sqrt{\frac{x^{2-1}}{x^{2}-2x+1}}$	$f(x) = \sqrt{\frac{x^2 - 1}{x^2 - 2x + 1}} = \sqrt{\frac{(x+1) \cdot (x-1)}{(x-1) \cdot (x-1)}} = \sqrt{\frac{(x+1)}{(x-1)}}$ $f'(x) = \frac{1}{2\sqrt{\frac{(xs1)}{(x-1)}}} \frac{x - 1 - x - 1}{(x-1)^2} - \frac{1}{\sqrt{\frac{(xs1)}{(x-1)}}} \frac{1}{(x-1)^2} - \frac{1}{\sqrt{x^2 - 1}}$ $\frac{1}{(x-1)}$ $f'(x) = \frac{-1}{\sqrt{x^2 - 1} \cdot (x-1)}$
33	$\mathbf{f}(\mathbf{x}) = e^{x+1}$	$\mathbf{f}'(\mathbf{x}) = \mathbf{e}^{x+1}$
34	$f(x) = -3. e^{x+1}$	$f'(x) = -3. e^{x+1}$
35	$f(x) = 7. e^{x^2+1}$	$f'(x) = 7. e^{x^2+1}. 2x = 14x.e^{x^2}$
36	$f(x) = -3. e^{x^2+x-1}$	$f'(x) = -3.(2x + 1) e^{x^2+x-1}$
37	$\mathbf{f}(\mathbf{x}) = \sqrt{\mathbf{e}^{x}}$	$\mathbf{f}'(\mathbf{x}) = \frac{e^{x}}{2\sqrt{e^{x}}}$
38	$\mathbf{f}(\mathbf{x}) = \sqrt{3e^{x+1}}$	$\mathbf{f}'(\mathbf{x}) = \frac{3e^{x_{\text{SI}}}}{2\sqrt{3}e^{x_{\text{SI}}}}$
39	$\mathbf{f}(\mathbf{x}) = -\frac{2}{\sqrt{e^x}}$	$f(x) = -2 \cdot (e^{x})^{-\frac{1}{2}}$ $f'(x) = \frac{+2}{2} \cdot (e^{x})^{-\frac{3}{2}} \cdot e^{x}$ $f'(x) = \frac{1}{\sqrt{e^{x}}}$
40	$f(x) = e^{x+1} - 3e^x + 2e^{x^3}$	$f'(x) = e^{x+1} - 3e^x + 6x^2e^{x^3}$
41	$\mathbf{f}(\mathbf{x}) = 3^{2x+1}$	$f'(x) = 3^{2x+1} \cdot \ln 3 \cdot 2$
42	$f(x) = 7^{x-1}$	$f'(x) = 7^{x-1} \cdot \ln 7$

43	$\mathbf{f}(\mathbf{x}) = 7^{x2-1}$	$f'(x) = 7^{x^2-1} \cdot \ln 7 \cdot 2x$
44	$\mathbf{f}(\mathbf{x}) = -\frac{1}{\sqrt{2^{x}}}$	$f'(x) = -(2^{x})^{-\frac{1}{2}}$ $f'(x) = \frac{1}{2}(2^{x})^{-\frac{3}{2}} \ln 2 \ 2^{x}$ $f'(x) = \frac{\ln 2}{2\sqrt{2^{x}}}$
45	$f(x) = 2^{x+1} - 3.5^x$	$f'(x) = 2^{x+1} \cdot \ln 2 - 3 \cdot (5^x \cdot \ln 5)$
46	$f(x) = (2^{x+1} - 3.5^x)^3$	$f'(x) = 3.(2^{x+1} - 3.5^x)^2.(2^{x+1}. \ln 2 - 3.(5^x. \ln 5))$
47	$\mathbf{f}(\mathbf{x}) = \sqrt{3^{x+1}}$	$f(x) = (3^{x+1})^{\frac{1}{2}}$ $f'(x) = \frac{1}{2} \cdot (3^{x+1})^{\frac{1}{2}} \cdot 3^{x+1} \cdot \ln 3$ $f'(x) = \frac{3^{x+1} \ln 3}{2\sqrt{3^{x+1}}}$
48	$\mathbf{f}(\mathbf{x}) = 7^{\sqrt{x+1}}$	$f'(x) = 7^{\sqrt{x+1}} \cdot \ln 7 \cdot \frac{1}{2\sqrt{x+1}}$
49	$\mathbf{f}(\mathbf{x}) = \frac{e^{3x} + e^{x^2}}{3}$	$f'(x) = \frac{e^{3x} \cdot 3}{3} + \frac{e^{x^2} \cdot 2x}{3}$ $f'(x) = e^{3x} + \frac{e^{x^2} \cdot 2x}{3}$

		$f'(x) = \frac{\sum_{z=1}^{x^2} \{ z.2x.x ^3 - z^{x^2} \cdot 3x\}^2}{x^u}$
50	$\mathbf{f}(\mathbf{x}) = \frac{7^{x^2}}{x^3}$	$f'(x) = \frac{\sum_{x=0}^{x^2} \{ z.2x.x ^3 - x^2 \cdot 3x\}^2}{x^u}$ $f'(x) = \frac{7^{x^2} \cdot (\ln 7.2.x^2 - 3)}{x^4}$
51		$f'(x) = \frac{e^{x^2} \cdot 2x \cdot x^3 - e^{x^2} \cdot 3x^2}{x^u} = \frac{x^2 (e^{x^2} \cdot 2 \cdot x^2 - e^{x^2} \cdot 3)}{x^u} = \frac{(e^{x^2} \cdot 2 \cdot x^2 - e^{x^2} \cdot 3)}{x^4}$ $f'(x) = \frac{e^{x^2} \cdot (2 \cdot x^2 - 3)}{x^4}$
52	$\mathbf{f}(\mathbf{x}) = \sqrt{\frac{7}{7}} \frac{x^2}{x^3}$	$\mathbf{f}'(\mathbf{x}) = \frac{1}{2 \cdot \sqrt{\frac{7x^2}{x^3}}} \cdot \frac{7^{x^2} \cdot \ln 7 \cdot 2x \cdot x^3 \cdot 7^{x^2} \cdot 3x^2}{x^6}$
53	$f(x) = \ln(x+3)$	$\mathbf{f}'(\mathbf{x}) = \frac{1}{x+3}$
54	$f(x) = 7x + \ln(x - 3)$	$f'(x)=7+\frac{1}{x-3}$
55	$f(x) = \ln(x^2 - 3x + 2)$	$f'(x) = \frac{1}{x^2 - 3x + 2} \cdot (2x - 3)$
56	$f(x) = \frac{1}{\ln(x-1)}$	$f'(x) = \frac{\frac{1}{(x\}1)}}{(\ln(x-1))^2} = -\frac{1}{(x-1)((\ln(x-1))^2)}$

		$f(x) = \ln \sqrt{\frac{x^2 - 1}{x^2 - 2x + 1}} =$
		$\ln \sqrt{\frac{(x-1).(x+1)}{(x-1).(x-1)}} = \ln \sqrt{\frac{(x+1)}{(x-1)}}$
57		$f'(x) = \frac{1}{\sqrt{\frac{(xs1)}{(x-1)}}} \cdot \frac{1}{2\sqrt{\frac{(xs1)}{(x-1)}}} \frac{x-1-x-1}{(x-1)^2} = \dots$
		$\frac{\frac{-2}{(x \le 1)}}{(x - 1)^2 \cdot 2 \cdot (x - 1)^2} = -\frac{1}{x^2 - 1}$ $\mathbf{f}'(\mathbf{x}) = -\frac{1}{x^2 - 1}$
		$f'(x) = -\frac{1}{x^2-1}$
		$f'(x) = \frac{1}{\sqrt{(x^5 - x^3 + 3)}} \cdot \frac{1}{2\sqrt{(x^5 - x^3 + 3)}} (5x^4 - 3x^2)$
58	$f(x)=\ln\left(\sqrt{\left(\left(x^{5}-x^{3}+3\right)\right)}\right)$	$\mathbf{f}'(\mathbf{x}) = \frac{5x^{4} - 3x^{2}}{(x^{5} - x^{3} + 3)}$
	$\mathbf{f}(\mathbf{x}) = \ln\left(\frac{e^{x_{-1}}}{e^{x_{+1}}}\right)$	$f'(x) = \frac{1}{\frac{e^{x}-1}{e^{x}s_{1}}} \cdot \frac{e^{x}(e^{x}+1) \cdot e^{x} \cdot (e^{x}-1)}{(e^{x}+1)^{2}}$ $f'(x) = \frac{+2e}{e^{2x}-1}$
59	\(e^x+1)	$\mathbf{f}'(\mathbf{x}) = \frac{+2e^{x}}{e^{2x}-1}$
		$f'(x) = \frac{u}{u} \log_a e$
60	$\mathbf{f}(\mathbf{x}) = \mathbf{log}_3(\mathbf{x} + 2)$	$f'(x) = \frac{1}{x+2} \log_3 e$
61	$f(x) = \log(x-3)^2$	$f'(x) = \frac{2.(x-3)}{(x-3)^2.Ln10}$
62	f(x) = sen(x+1)	$\mathbf{f}'(\mathbf{x}) = \mathbf{cos}(x+1)$

		$f'(x) = 2. \sin(2x^3 + 2x^2). \cos(2x^3 +$
63	$f(x) = sen(2x^3 + 2x^2)^2$	$2x^2)\left(6x^2+4x\right)$
64	f(x) = sen(x+1) + 5x	$f'(x) = \cos(x+1) + 5$
65	$f(x) = \sqrt{(sen(x+1))}$	$f(x) = \sin(x+1)^{\frac{1}{2}}$ $f'(x) = \frac{1}{2}\sin(x+1)^{\frac{1}{2}}.\cos(x+1)$
		$\mathbf{f}'(\mathbf{x}) = \frac{\cos(x+1)}{2.\sqrt{\sin(x+1)}}$
66	$f(x) = \cos(3x + 3)$	f'(x) =- $\sin(3x + 3).3$ f'(x) =- $3\sin(3x + 3)$
67	$f(x) = \cos(3x^2 + 3x)$	f'(x) =-sin(3x <sup>2</sup> + 3x). (6x + 3) f'(x) =-3. sin(3x <sup>2</sup> + 3x). (3x + 1)
68	$f(x) = \frac{1}{\operatorname{sen}(x+1)}$	$f'(x) = -\frac{\cos(x+1)}{(\sin(x+1))^2}$
69	$\mathbf{f}(\mathbf{x}) = \frac{1}{\cos x} + \frac{1}{\sin(x+1)}$	$f'(x) = \frac{\sin x}{(\cos x)^2} - \frac{\cos(x+1)}{(\sin(x+1))^2}$
70	$f(x) = \frac{1}{\sin x} - \frac{1}{\cos(x-1)}$	$f'(x) = \frac{-\text{Å} \zeta s x}{(\text{se}   x)^2} - \frac{\text{se}   (x+1)}{(\text{Å} \zeta s (x-1))^2}$
71	$f(x) = \sqrt[3]{\cos(3x+3)}$	$f'(x) = \frac{1}{3\sqrt{(\cos(3xs3))^2}} - \sin(3x + 3).3$ $f'(x) = -\frac{\sin(3x+3)}{\sqrt[3]{(\cos(3x+3))^2}}$

	$f(\mathbf{x}) = \frac{1}{\operatorname{sen}(x+1)} + (x^5 - x^3 +$	$f'(x) = -\frac{\cos(x+1)}{(\sin(x+1))^2} + 4 \cdot (x^5 - x^3 + $
72	3)4	$(5x^4 - 3x^2)$
73	$\mathbf{f}(\mathbf{x}) = \mathbf{ln}(x-1) + e^{x+1}$	$f'(x) = \frac{1}{x-1} + e^{x+1}$
74	$f(x) = e^{x-3} + \cos(x+1)-x^2$	$f'(x) = e^{x-3} - \sin(x+1) - 2x$
75	$f(x) = \tan(x-5)$	$\mathbf{f}'(\mathbf{x}) = \sec^2(\mathbf{x} - 5)$
76	$f(x) = \tan(x^3 + 3)$	$f'(x) = \sec^2(x^3 + 3).3x^2$
	$f(x) = -\tan(-5x^2 - 7)$	f'(x)= - sec <sup>2</sup> (-5x <sup>2</sup> -7)10x f'(x)= sec <sup>2</sup> (-5x <sup>2</sup> - 7).10x
77		
78	$\mathbf{f}(\mathbf{x}) = \frac{1}{\tan(x-5)}$	$f'(x) = \frac{-\sec^2(x-5)}{(\tan(x-5))^2}$
79	$\mathbf{f}(\mathbf{x}) = -\frac{3}{\tan(x+2)}$	$\mathbf{f}'(\mathbf{x}) = \frac{3.\sec 2 (x-5)}{(\tan (x+2))^2}$
80	$f(x) = \sqrt{(\tan(x-5))}$	$f'(x) = \frac{sec^2 (x-5)}{2.\sqrt{\tan(x-5)}}$
81	$f(x)=arcsen(x^2-3)$	$f'(x) = \frac{2x}{\sqrt{1-(x^2-3)^2}}$
	$f(x)=3x+arcsen(3x^3+$	$f'(x) = 3 + \frac{9 \cdot x^2 + 3}{\sqrt{1 - (3x^3 + 3x - 7)^2}}$
82	3x-7)	$\sqrt{1-(3x^3+3x-7)^2}$

83	$f(x)=arcsen\sqrt{(x^2-3)}$	$f'(x) = \frac{\frac{1}{2\sqrt{x^2 - 3}} \cdot 2x}{\sqrt{1 - (x^2 - 3)}}$ $= \frac{x}{\sqrt{(-x^2 + 4) \cdot (x^2 - 3)}}$
84	$f(x) = \arcsin\left(\frac{x+1}{x-1}\right)$	$f'(x)$ $= \frac{1}{\sqrt{1 - \left(\frac{x+1}{x-1}\right)^2}} \cdot \frac{x - 1 - (x+1)}{(x-1)^2}$ $f'(x)$ $= \frac{1}{\frac{\sqrt{x^2 - 2x + 1 - x^2 - 2x - 1}}{(x-1)}} \cdot \frac{-2}{(x-1)^2}$ $f'(x) = \frac{-2}{2 \cdot (x-1) \cdot \sqrt{-x}}$ $f'(x) = \frac{-1}{(x-1) \cdot \sqrt{-x}}$
85	$f(x)=\sqrt[3]{\mathrm{sen}(x^2+3)}$	$f(x) = \sqrt[3]{\sin(x^2 + 3)} = (\sin(x^2 + 3))^{\frac{1}{3}}$ $f'(x) = \frac{\cos(x^2 + 3) \cdot 2x}{3 \cdot \sqrt[3]{(\sin(x^2 + 3))^2}}$
86	$f(x)=\sqrt[3]{\tan e^x}$	$f'(x) = \frac{sec^2(e^x) \cdot e^x}{3 \cdot \sqrt[3]{(\tan(e^x))^2}}$
87	$f(x)=x^2$ . $\tan \sqrt{x}$	$f'(x) = 2x. \tan \sqrt{x} + x^2. \sec^2 \sqrt{x}. \frac{1}{2\sqrt{x}}$

88	$\mathbf{f}(\mathbf{x}) = \frac{1 + sen^2x}{x}$	$f'(x) = \frac{-2.senx.cosx}{x^2}$
89	$f(x)=\ln(\sin x)$	$f'(x) = \frac{1}{se x} . cos x$
90	$f(x)=arctg(x^2-3)$	$f'(x) = \frac{1}{+ (x^2 - 3)^2}.$ 21
91	$f(x)=e^{x^2-3} \ln (\sin x)$	$f'(x) = e^{x^2} \cdot 2x - 3 \frac{1}{(\sin x)} \cdot \cos x$
	$\mathbf{f}(\mathbf{x}) = \mathbf{e}^{x+3} +$	$f'(x) = ax + 3 + 1 + aaaaa^2(x)$
92	ln(x-5)-cot(x)	$f'(x) = e^{x+3} + \frac{1}{x-5} + \csc^2(x)$
93	$f(x)=arctg(\ln x)$	$f'(x) = \frac{1}{1 + (\ln x)^2} \cdot \frac{1}{x}$
94	$f(x)=\ln(\ln x)$	$f'(x) = \frac{1}{\ln x} \cdot \frac{1}{x}$
	$f(x)=\ln(\ln x) +$	$f'(x) = \frac{1}{\ln x} \cdot \frac{1}{x} + \frac{1}{1 + (x^3 - 1)^2} \cdot 3x^2$
95	$arctg(x^3-1)$	$\frac{1}{\ln x} \frac{1}{x} \frac{1}{1 + (x^3 - 1)^2} \frac{1}{1 + (x^3 - 1)^2}$
96	$f(x) = \cot(x^3-1)$	$f'(x) = -3.x^2 \cdot \csc^2(x^3-1)$
97	$\mathbf{f}(\mathbf{x}) = \sec \mathbf{x} - \mathbf{e}^{\mathbf{x}}$	$f'(x)=\sec x \cdot tg x - e^x$
98	$\mathbf{f}(\mathbf{x}) = \mathbf{cosec} \ \mathbf{x} + \frac{x^3}{3}$	$f'(x) = -\cos x \cdot tg x + x^2$
99	$f(x) = \cot(x+1)$	$f'(x) = -\csc^2(x+1)$
100	$\mathbf{f}(\mathbf{x}) = e^{x^2} - \cot(x^3 - 1)$	$f'(x) = e^{x^2} \cdot 2x + 3 \cdot x^2 \cdot \csc^2(x^3 - 1)$

Si tienes alguna duda no dudes en ponerte en contacto con nosotros.