



Guía de Integrales Indefinidas.

1.  $\int 5a^2 x^6 dx$
2.  $\int (6x^2 + 8x + 3) dx$
3.  $\int x(x+a)(x+b) dx$
4.  $\int (a + bx^3)^2 dx$
5.  $\int \sqrt{2px} dx$
6.  $\int \frac{dx}{\sqrt[n]{x}}$
7.  $\int (nx)^{\frac{1-n}{n}} dx$
8.  $\int (a^{\frac{2}{3}} - x^{\frac{2}{3}}) dx$
9.  $\int (\sqrt{x} + 1)(x - \sqrt{x} + 1) dx$
10.  $\int \frac{(x^2 + 1)(x^2 - 2)}{\sqrt[3]{x^2}} dx$
11.  $\int \frac{(x^m - x^n)^2}{\sqrt{x}} dx$
12.  $\int \frac{(\sqrt{a} - \sqrt{x})^4}{\sqrt{ax}} dx$
13.  $\int \frac{dx}{x^2 + 7}$
14.  $\int \frac{dx}{x^2 - 7}$
15.  $\int \frac{dx}{\sqrt{4 + x^2}}$
16.  $\int \frac{dx}{\sqrt{8 - x^2}}$
17.  $\int \frac{\sqrt{2 + x^2} - \sqrt{2 - x^2}}{\sqrt{4 - x^4}} dx$
18.  $\int \tan^2 x dx$
19.  $\int \tanh^2 x dx$
20.  $\int \cot^2 x dx$
21.  $\int \frac{1}{\tanh^2 x} dx$
22.  $\int 3^x e^x dx$
23.  $\int \frac{dx}{\sqrt{5x - 2}}$
24.  $\int \frac{x}{\sqrt{1 + x^4}} dx$
25.  $\int x^2 e^{x^3} dx$

26.  $\int \frac{a}{a-x} dx$
27.  $\int \frac{2x+3}{2x+1} dx$
28.  $\int \frac{1-3x}{3+2x} dx$
29.  $\int \frac{xdx}{a+bx}$
30.  $\int \frac{ax+b}{\alpha x+\beta} dx$
31.  $\int \frac{x^2+1}{x-1} dx$
32.  $\int \frac{x^2+5x+7}{x+3} dx$
33.  $\int \frac{x^4+x^2+1}{x-1} dx$
34.  $\int \left(a + \frac{b}{x-a}\right) dx$
35.  $\int \frac{x}{(x+1)^2} dx$
36.  $\int \frac{b}{\sqrt{1-y}} dy$
37.  $\int \sqrt{a-bx} dx$
38.  $\int \frac{x}{\sqrt{x^2+1}} dx$
39.  $\int \frac{\sqrt{x} + \ln x}{x} dx$
40.  $\int \frac{dx}{3x^2+5}$
41.  $\int \frac{dx}{7x^2-8}$
42.  $\int \frac{dx}{(a+b) - (a-b)x^2}, \quad (0 < b < a)$
43.  $\int \frac{x^2}{x^2+2} dx$
44.  $\int \frac{x^3}{a^2-x^2} dx$
45.  $\int \frac{x^2-5x+6}{x^2+4} dx$
46.  $\int \frac{dx}{\sqrt{7+8x^2}}$
47.  $\int \frac{dx}{\sqrt{7-5x^2}}$
48.  $\int \frac{2x-5}{3x^2-2} dx$
49.  $\int \frac{3-2x}{5x^2+7} dx$
50.  $\int \frac{3x+1}{\sqrt{5x^2+1}} dx$
51.  $\int \frac{x+3}{\sqrt{x^2-4}} dx$
52.  $\int \frac{xdx}{x^2-5}$
53.  $\int \frac{xdx}{2x^2+3}$
54.  $\int \frac{ax+b}{a^2x^2+b^2} dx$
55.  $\int \frac{xdx}{\sqrt{a^4-x^4}}$
56.  $\int \frac{x^2 dx}{1+x^6}$
57.  $\int \frac{x^2 dx}{\sqrt{x^6-1}}$
58.  $\int \sqrt{\frac{\arcsin x}{1-x^2}} dx$
59.  $\int \frac{\arctan \frac{x}{2}}{4+x^2} dx$
60.  $\int \frac{x - \sqrt{\arctan 2x}}{1+4x^2} dx$

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61.  $\int \frac{dx}{\sqrt{(1+x^2) \ln(x + \sqrt{1+x^2})}}$
62.  $\int ae^{-mx} dx$
63.  $\int 4^{2-3x} dx$
64.  $\int (e^t - e^{-t}) dt$
65.  $\int (e^{\frac{x}{a}} + e^{-\frac{x}{a}}) dx$
66.  $\int \frac{(a^x - b^x)^2}{a^x b^x} dx$
67.  $\int \frac{a^{2x} - 1}{\sqrt{a^x}} dx$
68.  $\int e^{-(x^2+1)} x dx$
69.  $\int x \cdot 7^{x^2} dx$
70.  $\int \frac{e^{\frac{1}{x}}}{x^2} dx$
71.  $\int 5^{\sqrt{x}} \frac{dx}{\sqrt{x}}$
72.  $\int \frac{e^x}{e^x - 1} dx$
73.  $\int e^x \sqrt{a - be^x} dx$
74.  $\int (e^{\frac{x}{a}} + 1)^{\frac{1}{3}} e^{\frac{x}{a}} dx$
75.  $\int \frac{dx}{2^x + 3}$
76.  $\int \frac{a^x dx}{1 + a^{2x}}$
77.  $\int \frac{e^{-bx}}{1 - e^{-2bx}} dx$
78.  $\int \frac{e^t}{\sqrt{1 - e^{2t}}} dt$
79.  $\int \sin(a + bx) dx$
80.  $\int \cos \frac{x}{\sqrt{2}} dx$
81.  $\int (\cos ax + \sin ax)^2 dx$
82.  $\int \cos \sqrt{x} \frac{dx}{\sqrt{x}}$
83.  $\int \sin(\log x) \frac{dx}{x}$
84.  $\int \sin^2 x dx$
85.  $\int \cos^2 x dx$
86.  $\int \sec^2(ax + b) dx$
87.  $\int \cot^2 ax dx$
88.  $\int \frac{dx}{\sin \frac{x}{a}}$
89.  $\int \frac{dx}{3 \cos(5x - \frac{\pi}{4})}$
90.  $\int \frac{x dx}{\cos^2 x^2}$
91.  $\int x \sin(1 - x^2) dx$
92.  $\int \tan x dx$
93.  $\int \cot x dx$
94.  $\int \cot \frac{x}{a - b} dx$
95.  $\int \frac{dx}{\tan \frac{x}{5}}$

96.  $\int \tan \sqrt{x} \frac{dx}{\sqrt{x}}$
97.  $\int x \cot(x^2 + 1) dx$
98.  $\int \frac{dx}{\sin x \cos x}$
99.  $\int \cos \frac{x}{a} \sin \frac{a}{x} dx$
100.  $\int \sin^3 6x \cos 6x dx$
101.  $\int \frac{\cos ax}{\sin^5 ax} dx$
102.  $\int \frac{\sin 3x}{3 + \cos 3x} dx$
103.  $\int \frac{\sin x \cos x}{\sqrt{\cos^2 x - \sin^2 x}} dx$
104.  $\int \sqrt{1 + 3 \cos^2 x} \sin 2x dx$
105.  $\int \tan \frac{x}{3} \sec^2 \frac{x}{3} dx$
106.  $\int \frac{\sqrt{\tan x}}{\cos^2 x} dx$
107.  $\int \frac{\cot^{\frac{2}{3}} x}{\sin^2 x} dx$
108.  $\int \frac{(\cos ax + \sin ax)^2}{\sin ax} dx$
109.  $\int x \sqrt[5]{5 - x^2} dx$
110.  $\int \frac{x^3 - 1}{x^4 - 4x + 1} dx$
111.  $\int \frac{x^3}{x^8 + 5} dx$
112.  $\int x e^{-x^2} dx$
113.  $\int \frac{3 - \sqrt{2 + 3x^2}}{2 + 3x^2} dx$
114.  $\int \frac{x^3 - 1}{x + 1} dx$
115.  $\int \frac{dx}{\sqrt{e^x}}$
116.  $\int \frac{1 - \sin x}{x + \cos x} dx$
117.  $\int \frac{\tan 3x - \cot 3x}{\sin 3x} dx$
118.  $\int \frac{dx}{x \ln^2 x}$
119.  $\int \frac{\sec^2 x}{\sqrt{\tan^2 x - 2}} dx$
120.  $\int \left(2 + \frac{x}{2x^2 + 1}\right) \frac{dx}{2x^2 + 1}$
121.  $\int a^{\sin x} \cos x dx$
122.  $\int \frac{x^2}{\sqrt[3]{x^3 + 1}} dx$
123.  $\int \frac{x dx}{\sqrt{1 - x^4}}$
124.  $\int \frac{(1 + x)^2}{x(1 + x^2)} dx$
125.  $\int \frac{\arcsin x + x}{\sqrt{1 - x^2}} dx$
126.  $\int \frac{\sec x \tan x}{\sqrt{\sec^2 x + 1}} dx$
127.  $\int \sqrt{\frac{\ln(x + \sqrt{x^2 + 1})}{1 + x^2}} dx$
128.  $\int \frac{\sqrt{x^2 + 1}}{x^2} dx$
129.  $\int \frac{dx}{x \sqrt{x^2 - 2}}, \quad x = \frac{1}{t}$

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130.  $\int \frac{dx}{e^x + 1}$ ,  $x = -\ln t$
131.  $\int x(5x^2 - 3)^7 dx$ ,  $5x^2 - 3 = t$
132.  $\int \frac{x dx}{\sqrt{x+1}}$ ,  $t = \sqrt{x+1}$
133.  $\int \frac{\cos x dx}{\sqrt{1 + \sin^2 x}}$ ,  $t = \sin x$
134.  $\int \frac{1+x}{1+\sqrt{x}} dx$
135.  $\int \frac{x^2 dx}{\sqrt{1-x^2}}$
136.  $\int \frac{x^3 dx}{\sqrt{2-x^2}}$
137.  $\int \frac{\sqrt{x^2 - a^2}}{x} dx$
138.  $\int \frac{dx}{x\sqrt{x^2 - 1}}$
139.  $\int \frac{\sqrt{x^2 + 1}}{x} dx$
140.  $\int \frac{dx}{x^2\sqrt{4-x^2}}$
141.  $\int \sqrt{1-x^2} dx$
142.  $\int \frac{dx}{x(1-x)}$ ,  $x = \sin^2 t$
143.  $\int x \ln x dx$
144.  $\int e^x \cos x dx$
145.  $\int \ln x dx$
146.  $\int \arctan x dx$
147.  $\int \arcsin x dx$
148.  $\int x \sin x dx$
149.  $\int x \cos 3x dx$
150.  $\int \frac{x}{e^x} dx$
151.  $\int x \cdot 2^{-x} dx$
152.  $\int x^2 e^{3x} dx$
153.  $\int (x^2 - 2x + 5)e^{-x} dx$
154.  $\int x^3 e^{-\frac{x}{3}} dx$
155.  $\int x \sin x \cos x dx$
156.  $\int (x^2 + 5x + 6) \cos 2x dx$
157.  $\int x^2 \ln x dx$
158.  $\int \ln^2 x dx$
159.  $\int \frac{\ln x}{x^3} dx$
160.  $\int \frac{\ln x}{\sqrt{x}} dx$
161.  $\int x \arctan x dx$
162.  $\int x \arcsin x dx$
163.  $\int \ln(x + \sqrt{1+x^2}) dx$
164.  $\int \frac{x}{\sin^2 x} dx$

165.  $\int \frac{x \cos x}{\sin^2 x} dx$

166.  $\int e^x \sin x dx$

167.  $\int 3^x \cos x dx$

168.  $\int e^{ax} \sin bxdx$

169.  $\int \sin \ln x dx$

170.  $\int x^3 e^{-x^2} dx$

171.  $\int e^{\sqrt{x}} dx$

172.  $\int (x^2 - 2x + 3) \ln x dx$

173.  $\int \frac{\ln^2 x}{x^2} dx$

174.  $\int x \ln \frac{1-x}{1+x} dx$

175.  $\int \frac{\ln(\ln x)}{x} dx$

176.  $\int x^2 \arctan 3x dx$

177.  $\int x(\arctan x)^2 dx$

178.  $\int \frac{\arcsin \sqrt{x}}{\sqrt{1-x}} dx$

179.  $\int \frac{\sin^2 x}{e^x} dx$

180.  $\int \cos^2(\ln x) dx$

181.  $\int \frac{x^2}{\sqrt{9-x^2}} dx$

182.  $\int \frac{dx}{2x^2 - 5x + 7}$

183.  $\int \frac{x+3}{\sqrt{x^2+2x+2}} dx$

184.  $\int \frac{dx}{(x+1)\sqrt{x^2+1}}$

185.  $\int \frac{dx}{x\sqrt{1-x^2}}$

186.  $\int \frac{x}{x^4 - 4x^2 + 3} dx$

187.  $\int \frac{x}{(x-1)(x+1)^2} dx$