

INTEGRALES

1. $\int x^3 dx$
2. $\int \frac{x^3}{3} dx$
3. $\int \frac{x^4}{6} dx$
4. $\int (x^3 + 3) dx$
5. $\int (x^2 + 2x - \frac{1}{x}) dx$
6. $\int \frac{x^3 - x^2 + 1}{x} dx$
7. $\int \frac{dx}{x^2}$
8. $\int \frac{dx}{x^5}$
9. $\int \frac{x^4 - 2x + 3}{x^6} dx$
10. $\int \frac{4 \sqrt[3]{x}}{3} dx$
11. $\int \frac{dx}{\sqrt[4]{x}}$
12. $\int \left(\frac{8}{3} \sqrt[3]{x} + 3 \sqrt{x} \right) dx$
13. $\int \sqrt[3]{x} (\sqrt{x} + 1) dx$
14. $\int (x^2 - 2 \operatorname{sen} x + 8 \operatorname{cos} x) dx$
15. $\int \left(e^x + \frac{1}{x} \right) dx$
16. $\int \frac{dx}{x \sqrt{x}}$
17. $\int \frac{(x+1)(x^2+3)}{x^3} dx$
18. $\int (\sec^2 x + \operatorname{cos} x + x) dx$
19. $\int \operatorname{tg}^2 x dx$
20. $\int \left(\sqrt{x} + \frac{1}{\sqrt{x}} \right) dx$
21. $\int \frac{\cos^2 x - \operatorname{sen}^2 x}{\operatorname{sen}^2 x \cos^2 x} dx$
22. $\int e^x \left(1 + \frac{e^{-x}}{x} \right) dx$
23. $\int 5^x 3^x dx$
24. $\int \left(\frac{1}{\sqrt{1-x^2}} - \frac{3}{1+x^2} \right) dx$
25. $\int \frac{dx}{\operatorname{sen}^2 x \cos^2 x}$
26. $\int \frac{2 - \operatorname{sen}^3 x}{\operatorname{sen}^2 x} dx$
27. $\int \frac{dx}{3x+2}$
28. $\int \frac{dx}{3-x}$
29. $\int \frac{x dx}{2+x^2}$
30. $\int \frac{2 dx}{(x+1)^3}$
31. $\int \frac{x^2 dx}{1+x^3}$
32. $\int \frac{\operatorname{sen} 2x dx}{3 + \operatorname{sen}^2 x}$
33. $\int \frac{(x-3) dx}{\sqrt{x^2 - 6x + 1}}$
34. $\int e^x \sqrt{2 + e^x} dx$
35. $\int \frac{\ln x}{x} dx$
36. $\int x^2 \sqrt{x^3 + 1} dx$
37. $\int \operatorname{sen} 5x dx$
38. $\int 6x \cos x^2 dx$
39. $\int \frac{\cos x dx}{1 + \operatorname{sen}^2 x}$
40. $\int \frac{dx}{\cos^2 x \sqrt{1 - \operatorname{tg}^2 x}}$
41. $\int x^4 e^{x^5} dx$
42. $\int \frac{(4x^3) dx}{1 + x^8}$
43. $\int 2^x dx$
44. $\int \frac{dx}{x^2 + 9}$
45. $\int e^{7x} dx$
46. $\int (e^x + e^{-x}) dx$
47. $\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$
48. $\int \frac{\cos x}{e^{\operatorname{sen} x}} dx$
49. $\int \frac{dx}{\sqrt{25 - x^2}}$
50. $\int \frac{dx}{2x^2 + 9}$
51. $\int (2x + 5)^9 dx$
52. $\int \frac{(\operatorname{arctg} x)^3 dx}{1 + x^2}$
53. $\int \operatorname{sen}^5 x \cos x dx$
54. $\int \frac{\cos x}{\sqrt[3]{\operatorname{sen}^2 x}} dx$

$$55. \int \frac{dx}{x \ln x}$$

$$58. \int \frac{dx}{(\arccos x)^3 \sqrt{1-x^2}}$$

$$61. \int \sqrt{\cos x} \sin x \, dx$$

$$64. \int \frac{dx}{(x+1)^2 + 1}$$

$$67. \int \frac{x^2 \, dx}{2+x^6}$$

$$70. \int \frac{\cos^3 x}{\sin^3 x} \, dx$$

$$73. \int \frac{x \, dx}{\sqrt{1-x^4}}$$

$$75. \int \ln(\cos x) \, \operatorname{tg} x \, dx$$

$$76. \int \frac{\ln(\ln x)}{x \ln x} \, dx$$

$$79. \int \sin 2x \frac{x}{\sqrt{2-\cos 2x}} \, dx$$

$$56. \int \frac{\cos \sqrt{x}}{\sqrt{x}} \, dx$$

$$59. \int \frac{1 + \ln x}{5 + x \ln x} \, dx$$

$$62. \int e^{e^x} e^x \, dx$$

$$65. \int \frac{\sin^3 x}{\sqrt{\cos x}} \, dx$$

$$68. \int \frac{dx}{x \sqrt{1-\ln^2 x}} \, dx$$

$$71. \int x^3 e^{-x^4} \, dx$$

$$74. \int x \sqrt{1+x^2} \, dx$$

$$77. \int \frac{e^{2 \operatorname{tg} x}}{\cos^2 x} \, dx$$

$$80. \int \sin^3 x \cos^2 x \, dx$$

$$57. \int (e^x + e^{-x})^2 \, dx$$

$$60. \int \frac{\operatorname{tg}^2 x + \operatorname{tg} x}{\cos^2 x} \, dx$$

$$63. \int e^x \cos e^x \, dx$$

$$66. \int \sin \ln x \frac{dx}{x}$$

$$69. \int \frac{\sqrt{3+\sqrt{x}}}{\sqrt{x}} \, dx$$

$$72. \int \frac{e^x}{e^{2x} - 2e^x + 1} \, dx$$

$$78. \int \frac{\sin x}{\cos^2 x} \, dx$$

$$81. \int \frac{\cos x}{e^{\sin x}} \, dx$$

INTEGRACIÓN POR PARTES

$$82. \int x \sin x \, dx$$

$$85. \int x^3 e^x \, dx$$

$$88. \int \arcsin x \, dx$$

$$91. \int x^2 \sin x \, dx$$

$$94. \int \sqrt{x} \ln x \, dx$$

$$97. \int \frac{x \, dx}{\sqrt{1+x}}$$

$$100. \int \frac{\ln x}{\sqrt{x}} \, dx$$

$$103. \int \ln x \, dx$$

$$106. \int x e^{-3x} \, dx$$

$$109. \int \frac{\ln x}{x^3} \, dx$$

$$112. \int x (\ln x)^2 \, dx$$

$$115. \int \frac{x \, dx}{\sqrt{1-x}}$$

$$83. \int x \cos 3x \, dx$$

$$86. \int x^2 e^{3x} \, dx$$

$$89. \int x \sqrt{1+2x} \, dx$$

$$92. \int (\ln x)^2 \, dx$$

$$95. \int \arctg x \, dx$$

$$98. \int \sin(\ln x) \, dx$$

$$101. \int (x^2 - x) e^{-x} \, dx$$

$$104. \int e^x \cos x \, dx$$

$$107. \int \frac{x \, dx}{\cos^2 x}$$

$$110. \int x^2 \sin x \, dx$$

$$113. \int x^3 \ln x \, dx$$

$$116. \int (x-3) \sin x \, dx$$

$$84. \int x^2 \ln x \, dx$$

$$87. \int x e^x \, dx$$

$$90. \int x \arctg x \, dx$$

$$93. \int \sin(\ln x) \, dx$$

$$96. \int x^2 \cos x \, dx$$

$$99. \int \frac{2x \, dx}{\cos^2 x}$$

$$102. \int x^3 e^{x^2} \, dx$$

$$105. \int e^x \sin x \, dx$$

$$108. \int x \cos x \, dx$$

$$111. \int e^{-3x} \cos x \, dx$$

$$114. \int \frac{\ln(\ln x)}{x} \, dx$$

$$117. \int \ln(x + \sqrt{1+x^2}) \, dx$$

$$118. \int \frac{x \arcsen x}{\sqrt{1-x^2}} dx$$

$$119. \int x \arcsen x^2 dx$$

$$120. \int \sqrt{x} (\ln x)^2 dx$$

INTEGRACIÓN DE FUNCIONES RACIONALES

$$121. \int \frac{2x-3}{x+2} dx$$

$$122. \int \frac{dx}{x^2-4}$$

$$123. \int \frac{x-1}{x^2+x-6} dx$$

$$124. \int \frac{2 dx}{x^2+5x+6}$$

$$125. \int \frac{x+1}{x(x-1)^2} dx$$

$$126. \int \frac{dx}{x^2+2x} 2$$

$$127. \int \frac{x^2+1}{x^2+x-6} dx$$

$$128. \int \frac{x^3-1}{x^2+x} dx$$

$$129. \int \frac{x^2+1}{x^2-1} dx 3$$

$$130. \int \frac{dx}{x^2(x+1)}$$

$$131. \int \frac{dx}{x^2-9}$$

$$132. \int \frac{x dx}{(x-1)^2(x+1)} 4$$

$$133. \int \frac{6 dx}{x(x-1)(x+2)}$$

$$134. \int \frac{x^2-x+1}{x^3-2x^2+x} dx$$

$$135. \int \frac{2x^2+2x-1}{x+1} dx 5$$

$$136. \int \frac{(2x^2-7x) dx}{x^3-3x^2+4}$$

$$137. \int \frac{(2x+4) dx}{x^2+2x-3}$$

$$138. \int \frac{dx}{(x+1)(x-2)^2(x+3)}$$

$$139. \int \frac{dx}{x^3+x^2}$$

$$140. \int \frac{(3x^2+2x+5) dx}{(x-2)^2(x+1)^2}$$

$$141. \int \frac{x^5+x^4-8}{x^3-4x} dx$$

$$142. \int \frac{x^2-1}{x^2+1} dx$$

$$143. \int \frac{(x-8) dx}{x^3-4x^2+4x}$$

$$144. \int \frac{x+1}{x^3-4x^2+5x-2} dx$$

$$145. \int \frac{dx}{x^3+x^2+x}$$

$$146. \int \frac{dx}{x^2+4}$$

$$147. \int \frac{dx}{x^2-2x+5}$$

$$148. \int \frac{3 dx}{x^3-1}$$

$$149. \int \frac{5x^2-2x+25}{x^3-6x^2+25x} dx$$

$$150. \int \frac{-2x dx}{(x-1)^2(x^2+1)}$$

INTEGRALES VARIADAS

$$151. \int (x^3+3x^2+2x-3) dx$$

$$152. \int (e^x+3) dx$$

$$153. \int \left(e^{-x} + \sqrt[3]{x} - \frac{1}{\sqrt[3]{2x}} + \frac{1}{x^2} \right) dx$$

$$154. \int x^2 e^x dx$$

$$155. \int \frac{dx}{(3x+1)^4}$$

$$156. \int \frac{3+2x^2}{5+(3x+2/3)x^3} dx$$

$$157. \int \frac{(2x+1) dx}{(x^2+x)^3}$$

$$158. \int \frac{x}{\cos^2 x} dx$$

$$159. \int \frac{5 dx}{e^x+e^{-x}}$$

$$160. \int (1+\tan^2 x^2) x dx$$

$$161. \int \sec^2 x dx$$

$$162. \int \tan^2 x dx$$

$$163. \int (3+\tan^2 x) dx$$

$$164. \int \frac{\sqrt{1+x}}{\sqrt{1-x}} dx$$

$$165. \int \sqrt{2+x^2} x dx$$

$$166. \int \frac{5 \cos x}{\sqrt{1 + \sin x}} dx$$

$$169. \int \frac{3x^3 dx}{\sqrt{x^2 + 1}}$$

$$172. \int \left(\frac{6x^2}{\sin^2 x^3} + \frac{4}{\cos^2 4x} \right) dx$$

$$175. \int \frac{x^2 dx}{x^3 + 4}$$

$$178. \int \frac{\operatorname{tg} x}{\cos^2 x} dx$$

$$181. \int \frac{x dx}{1 + (x^2 + 3)^2}$$

$$184. \int \frac{dx}{1 - \sin x}$$

$$187. \int x \cos(1 + x^2) dx$$

$$190. \int \frac{5e^x}{2 + e^x} dx$$

$$193. \int \frac{x dx}{x + \sqrt{x}}$$

$$196. \int \frac{2x}{9 + 5x^2} dx$$

$$199. \int \frac{\cos x}{\sin^3 x} dx$$

$$167. \int \frac{e^{3x} + e^x + 1}{e^x} dx$$

$$170. \int \frac{5^x}{3^x} dx$$

$$173. \int \frac{dx}{e^{2x} + 1}$$

$$176. \int \frac{e^{3x}}{1 + e^{6x}} dx$$

$$179. \int \operatorname{tg} x dx$$

$$182. \int \frac{\ln x}{x} dx$$

$$185. \int e^{\sin x} \cos x dx$$

$$188. \int \frac{dx}{\sqrt{x} (1 + \sqrt{x})}$$

$$191. \int \frac{x - \sqrt{x}}{\sqrt{x} - \sqrt[3]{x}} dx$$

$$194. \int \frac{\operatorname{tg}^3 x}{\cos^2 x} dx$$

$$197. \int \frac{2x^3 + x^2 + 3x + 1}{x + 1} dx$$

$$200. \int \frac{2x dx}{\sqrt{1 - x^4}} dx$$

$$168. \int \frac{dx}{\sqrt{9 - x^2}}$$

$$171. \int \frac{\ln x}{x^2} dx$$

$$174. \int \frac{dx}{x^2 + 4}$$

$$177. \int e^{-5x^2} (-5x) dx$$

$$180. \int (\cos 5x - 3 \sin 2x) dx$$

$$183. \int (x - e^x \cos x) dx$$

$$186. \int \sin^3 x \cos^3 x dx$$

$$189. \int \frac{x + 9}{x^2 - 9} dx$$

$$192. \int \frac{dx}{1 - \sin^2 x}$$

$$195. \int \frac{e^{\operatorname{tg} x}}{\cos^2 x} dx$$

$$198. \int \frac{1 + \sin^2 x}{\sin x \cos x} dx$$

SOLUCIONES A LAS INTEGRALES

$$1. \frac{x^4}{4} + c$$

$$3. \frac{x^5}{30} + c$$

$$5. \frac{x^3}{3} + x^2 - \ln|x| + c$$

$$7. -\frac{1}{x} + c$$

$$9. -\frac{1}{x} + \frac{1}{2x^4} - \frac{3}{5x^5} + c$$

$$11. \frac{4\sqrt[4]{x^3}}{3} + c$$

$$13. \frac{6}{11}\sqrt{x^{11}} + \frac{3}{4}\sqrt[3]{x^4} + c$$

$$15. e^x + \ln|x| + c$$

$$17. x + \ln|x| - \frac{3}{x} - \frac{3}{2x^2} + c$$

$$19. \operatorname{tg} x - x + c$$

$$21. -\operatorname{cotg} x - \operatorname{tg} x + c$$

$$23. \frac{15^x}{\ln 15} + c$$

$$25. \operatorname{tg} x - \operatorname{cotg} x + c$$

$$27. \frac{1}{3} \ln|3x + 2| + c$$

$$29. \frac{1}{2} \ln|2 + x^2| + c$$

$$31. \frac{1}{3} \ln|1 + x^3| + c$$

$$33. \sqrt{x^2 - 6x + 1} + c$$

$$35. \frac{\ln^2 x}{2} + c$$

$$37. -\frac{1}{5} \cos 5x + c$$

$$39. \operatorname{arctg}(\operatorname{sen} x) + c$$

$$41. \frac{e^{x^5}}{5} + c$$

$$2. \frac{x^4}{12} + c$$

$$4. \frac{x^4}{4} + 3x + c$$

$$6. \frac{x^3}{3} + \frac{x^2}{2} + \ln|x| + c$$

$$8. -\frac{1}{4x^4} + c$$

$$10. \sqrt[3]{x^4} + c$$

$$12. 2\sqrt[3]{x^4} + 2\sqrt{x^3} + c$$

$$14. \frac{x^3}{3} + 2\cos x + 8\operatorname{sen} x + c$$

$$16. \frac{-2}{\sqrt{x}} + c$$

$$18. \operatorname{tg} x + \operatorname{sen} x + \frac{x^2}{2} + c$$

$$20. \frac{2\sqrt{x^3}}{3} + 2\sqrt{x} + c$$

$$22. e^x + \ln|x| + c$$

$$24. \operatorname{arcsen} x - 3\operatorname{arctg} x + c$$

$$26. -2\operatorname{cotg} x + \cos x + c$$

$$28. -\ln|3 - x| + c$$

$$30. \frac{-1}{(x+1)^2} + c$$

$$32. \ln|3 + \operatorname{sen}^2 x| + c$$

$$34. \frac{2\sqrt{(2+e^x)^3}}{3} + c$$

$$36. \frac{2\sqrt{(x^3+1)^3}}{9} + c$$

$$38. 3\operatorname{sen} x^2 + c$$

$$40. \operatorname{arc} \operatorname{sen}(\operatorname{tg} x) + c$$

$$42. \operatorname{arc} \operatorname{tg} x^4 + c$$

$$43. \frac{2^x}{\ln 2} + c$$

$$45. \frac{e^{7x}}{7} + c$$

$$47. 2e^{\sqrt{x}} + c$$

$$49. \arcsin \left(\frac{x}{5} \right) + c$$

$$51. \frac{(2x+5)^{10}}{20} + c$$

$$53. \frac{\sin^6 x}{6} + c$$

$$55. \ln |\ln |x|| + c$$

$$57. \frac{e^{2x}}{2} + 2x - \frac{e^{-2x}}{2} + c$$

$$59. \ln |5 + x \ln x| + c$$

$$61. \frac{-2\sqrt{(\cos x)^3}}{3} + c$$

$$63. \sin e^x + c$$

$$65. -2\sqrt{\cos x} + \frac{2\sqrt{(\cos x)^5}}{5} + c$$

$$67. \frac{1}{3\sqrt{2}} \arctan \left(\frac{x^3}{\sqrt{2}} \right) + c$$

$$69. \frac{4\sqrt{(3+\sqrt{x})^3}}{3} + c$$

$$71. -\frac{1}{4} e^{-x^4} + c$$

$$73. \frac{1}{2} \arcsin x^2 + c$$

$$75. -\frac{\ln^2(\cos x)}{2} + c$$

$$77. \frac{1}{2} e^{2 \operatorname{tg} x} + c$$

$$79. -\sqrt{2 - \cos 2x} + c$$

$$81. e^{-\sin x} + c$$

$$83. \frac{x \sin 3x}{3} + \frac{\cos 3x}{9} + c$$

$$85. x^3 e^x - 3x^2 e^x + 6x e^x + 6 e^x + c$$

$$44. \frac{1}{3} \arctan \frac{x}{3} + c$$

$$46. e^x - e^{-x} + c$$

$$48. -e^{-\sin x} + c$$

$$50. \frac{1}{3\sqrt{2}} \arctan \left(\frac{\sqrt{2} x}{3} \right) + c$$

$$52. \frac{(\arctan x)^4}{4} + c$$

$$54. 3 \sqrt[3]{\sin x} + c$$

$$56. 2 \sin \sqrt{x} + c$$

$$58. \frac{(\arccos x)^2}{2} + c$$

$$60. \frac{\operatorname{tg}^3 x}{3} + \frac{\operatorname{tg}^2 x}{2} + c$$

$$62. e^{e^x} + c$$

$$64. \arctan (x+1) + c$$

$$66. -\cos(\ln x) + c$$

$$68. \arcsin(\ln x) + c$$

$$70. -\frac{1}{2 \sin^2 x} - \ln |\sin x| + c$$

$$72. -\frac{1}{e^x - 1} + c$$

$$74. \frac{1}{3} \sqrt{(1+x^2)^3} + c$$

$$76. \frac{\ln^2(\ln x)}{2} + c$$

$$78. \frac{1}{\cos x} + c$$

$$80. -\frac{\cos^3 x}{3} + \frac{\cos^5 x}{5} + c$$

$$82. -x \cos x + \sin x + c$$

$$84. \frac{x^3 \ln x}{3} - \frac{x^3}{9} + c$$

$$86. \frac{x^2 e^{3x}}{3} - \frac{2}{9} x e^{3x} + \frac{2}{27} e^{3x} + c$$

87. $x e^x - e^x + c$
88. $x \arcsin x + \sqrt{1-x^2} + c$
89. $\frac{x \sqrt{(1+2x)^3}}{3} - \frac{1}{15} \sqrt{(1+2x)^5} + c$
90. $\frac{x^2 \arctan x}{2} - \frac{x}{2} + \frac{\arctan x}{2} + c$
91. $-x^2 \cos x + 2x \sin x + 2 \cos x + c$
92. $x (\ln x)^2 - 2x \ln x + 2x + c$
93. $2\sqrt{x} e^{\sqrt{x}} - 2e^{\sqrt{x}} + c$
94. $\frac{2 \sqrt{x^3} \ln x}{3} - \frac{4 \sqrt{x^3}}{9} + c$
95. $x \arctan x - \frac{1}{2} \ln |1+x^2| + c$
96. $x^2 \sin x + 2x \cos x - 2 \sin x + c$
97. $2x \sqrt{1+x} - \frac{4 \sqrt{(1+x)^3}}{3} + c$
98. $\frac{x \sin(\ln x) - x \cos(\ln x)}{2} + c$
99. $2x \tan x + 2 \ln |\cos x| + c$
100. $2\sqrt{x} \ln x - 4\sqrt{x} + c$
101. $-e^{-x} (x^2 - x) - e^{-x} (2x - 1) - 2e^{-x} + c$
102. $x^2 \frac{e^{x^2}}{2} - \frac{e^{x^2}}{2} + c$
103. $x \ln x - x + c$
104. $\frac{e^x \cos x + e^x \sin x}{2} + c$
105. $\frac{e^x \sin x - e^x \cos x}{2} + c$
106. $-\frac{x e^{-3x}}{3} - \frac{e^{-3x}}{9} + c$
107. $x \tan x + \ln |\cos x| + c$
108. $x \sin x + \cos x + c$
109. $-\frac{\ln x}{2x^2} - \frac{1}{4x^2} + c$
110. $-x^2 \cos x + 2x \sin x + 2 \cos x + c$
111. $\frac{e^{-3x} \sin x}{10} - \frac{3e^{-3x} \cos x}{10} + c$
112. $\frac{x^2}{2} (\ln x)^2 - \frac{x^2}{2} \ln x + \frac{x^2}{4} + c$
113. $\frac{x^4}{4} \ln |x| - \frac{x^4}{16} + c$
114. $\ln |x| \cdot \ln (\ln |x|) - \ln |x| + c$
115. $-2x \sqrt{1-x} - \frac{4 \sqrt{(1-x)^3}}{3} + c$
116. $-(x-3) \cos x + \sin x + c$
117. $x \ln \left| x + \sqrt{1+x^2} \right| - \sqrt{1+x^2} + c$
118. $-\sqrt{1-x^2} \arcsin x + x + c$
119. $\frac{x^2}{2} \arcsin x^2 + \frac{1}{2} \sqrt{1-x^4} + c$
- 120.
- $\frac{2}{3} \sqrt{x^3} (\ln x)^2 - \frac{8}{9} \sqrt{x^3} (\ln x) + \frac{16}{27} \sqrt{x^3} + c$
121. $2x - 7 \ln |x+2| + c$
122. $\frac{1}{4} \ln \left| \frac{x-2}{x+2} \right| + c$
123. $\frac{4}{5} \ln |x+3| + \frac{1}{5} \ln |x-2| + c$
124. $2 \ln |x+2| - 2 \ln |x+3| + c$
125. $\ln |x| + \ln |x-1| - \frac{2}{x-1} + c$
126. $\frac{1}{2} \ln |x| - \frac{1}{2} \ln |x+2| + c$
127. $x + \ln |x-2| - 2 \ln |x+3| + c$
128. $\frac{x^2}{2} - x - \ln |x| + 2 \ln |x+1| + c$

129. $x - \ln |x+1| + \ln |x-1| + c$ 130. $\ln \left| \frac{x+1}{x} \right| - \frac{1}{x} + c$
131. $\frac{1}{6} \ln \left| \frac{x-3}{x+3} \right| + c$ 132. $\frac{1}{4} \ln \left| \frac{x+1}{x-1} \right| - \frac{1/2}{x-1} + c$
133. $-3 \ln |x| + 2 \ln |x-1| + \ln |x+2| + c$ 134. $\ln |x| - \frac{1}{x-1} + c$
135. $x^2 - \ln |x+1| + c$ 136. $\ln |x+1| + \ln |x-2| + \frac{2}{x-2} + c$
137. $\frac{1}{2} \ln |x+3| + \frac{3}{2} \ln |x-1| + c$ 138. $\ln |x+1| - \frac{3}{x-2} - 2 \ln |x+2| + c$
139. $-\ln |x| - \frac{1}{x} + \ln |x+1| + c$ 140. $-\frac{7}{3(x-2)} - \frac{2}{3(x+1)} + c$
141. $\frac{x^3}{3} + \frac{x^2}{2} + 4x + \ln \left| \frac{x^2(x-2)^5}{(x+2)^3} \right| + c$ 142. $x - 2 \operatorname{arctg} x + c$
143. $2 \ln \left| \frac{x-2}{x} \right| + \frac{3}{x-2} + c$ 144. $-3 \ln |x-1| + \frac{2}{x-1} + 3 \ln |x-2| + c$
145. $\ln |x| - \frac{1}{2} \ln |x^2+x+1| - \frac{\sqrt{3}}{3} \operatorname{arctg} \left(\frac{2x+1}{\sqrt{3}} \right) + c$ 146. $\frac{1}{2} \operatorname{arctg} \left(\frac{x}{2} \right) + c$
147. $\frac{1}{2} \operatorname{arctg} \left(\frac{x-1}{2} \right) + c$ 148. $\ln \left| \frac{x-1}{\sqrt{x^2+x+1}} \right| - \sqrt{3} \operatorname{arctg} \left(\frac{2x+1}{\sqrt{3}} \right) + c$
149. $\ln |x| + 2 \ln |x^2-6x+25| + 4 \operatorname{arctg} \frac{x-3}{4} + c$ 150. $\frac{1}{x-1} + \operatorname{arctg} x + c$
151. $\frac{x^4}{4} + x^3 + x^2 - 3x + c$ 152. $e^x + 3x + c$
153. $-e^{-x} + \frac{3\sqrt[3]{x^4}}{4} - \frac{3}{4}\sqrt[3]{(2x)^2} - \frac{1}{x} + c$ 154. $x^2 e^x - 2x e^x + 2 e^x + c$
155. $\frac{-1}{9(3x+1)^3} + c$ 156. $\ln \left| 5 + 3x + \frac{2}{3}x^3 \right| + c$
157. $\frac{-1}{2(x^2+x)^2} + c$ 158. $x \operatorname{tg} x + \ln |\cos x| + c$
159. $5 \operatorname{arctg} e^x + c$ 160. $\frac{1}{2} \operatorname{tg} x^2 + c$
161. $\frac{1}{2} \left(x - \frac{\operatorname{sen} 2x}{2} \right) + c$ 162. $\operatorname{tg} x - x + c$
163. $2x + \operatorname{tg} x + c$ 164. $\operatorname{arcsen} x - \sqrt{1-x^2} + c$
165. $\frac{\sqrt{(2+x^2)^3}}{3} + c$ 166. $10 \sqrt{1 + \operatorname{sen} x} + c$
167. $\frac{e^{2x}}{2} + x - e^{-x} + c$ 168. $\operatorname{arcsen} \left(\frac{x}{3} \right) + c$

$$169. 3x^2 \sqrt{x^2+1} - 2\sqrt{(x^2+1)^3} + c$$

$$171. -\frac{\ln x}{x} - \frac{1}{x} + c$$

$$173. -\frac{1}{2} e^{-2x-1} + c$$

$$175. \frac{1}{3} \ln |x^3+4| + c$$

$$177. \frac{1}{2} e^{-5x^2} + c$$

$$179. -\ln |\cos x| + c$$

$$181. \frac{1}{2} \arctg(x^2+3) + c$$

$$183. \frac{x^2}{2} - \frac{e^x \cos x + e^x \sen x}{2} + c$$

$$185. e^{\sen x} + c$$

$$187. \frac{1}{2} \sen(1+x^2) + c$$

$$189. 2 \ln |x-3| - \ln |x+3| + c$$

$$191. \frac{2\sqrt[6]{x^9}}{3} + \frac{3\sqrt[3]{x^4}}{4} + \frac{6\sqrt[6]{x^7}}{7} + c$$

$$193. x - \sqrt{x} - 2 \ln |\sqrt{x}+1| + c$$

$$195. e^{tg x} + c$$

$$197. \frac{2x^3}{3} - \frac{x^2}{2} + 4x - 3 \ln |x+1| + c$$

$$199. \frac{-1}{2 \sen^2 x} + c$$

$$170. \left(\frac{5}{3}\right)^x \cdot \frac{1}{\ln(5/3)} + c$$

$$172. -2 \cotg(x^3) + tg(4x) + c$$

$$174. \frac{1}{2} \arctg\left(\frac{x}{2}\right) + c$$

$$176. \frac{1}{3} \arctg(e^{3x}) + c$$

$$178. \frac{tg^2 x}{2} + c$$

$$180. \frac{\sen 5x}{5} + \frac{3 \cos 2x}{2} + c$$

$$182. \frac{\ln^2 |x|}{2} + c$$

$$184. \frac{2}{1-tg(x/2)} + c$$

$$186. \frac{\sen^4 x}{4} - \frac{\sen^6 x}{6} + c$$

$$188. 2 \ln |1+\sqrt{x}| + c$$

$$190. 5 \ln |2+e^x| + c$$

$$192. tg(x) + c$$

$$194. \frac{tg^4 x}{4} + c$$

$$196. \frac{1}{5} \ln |9+5x^2| + c$$

$$198. \ln |\sen x| - 2 \ln |\cos x| + c$$

$$200. \arcsen(x^2) + c$$