

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. $\int \frac{\operatorname{cos}^2 x - \operatorname{sen}^2 x}{\operatorname{sen}^2 x \operatorname{cos}^2 x} dx$
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. $\int \frac{dx}{\operatorname{sen}^2 x \operatorname{cos}^2 x}$
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. $\int 6x \operatorname{cos} x^2 dx$
39. $\int \frac{\operatorname{cos} x dx}{1 + \operatorname{sen}^2 x}$
40. $\int \frac{dx}{\operatorname{cos}^2 x \sqrt{1 - \operatorname{tg}^2 x}}$
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. $\int \frac{\operatorname{cos} x}{e^{\operatorname{sen} x}} dx$
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. $\int \operatorname{sen}^5 x \operatorname{cos} x dx$
54. $\int \frac{\operatorname{cos} x}{\sqrt[3]{\operatorname{sen}^2 x}} dx$

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

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

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

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

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

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

$$61. \int \sqrt{\cos x} \operatorname{sen} x dx$$

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

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

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

$$65. \int \frac{\operatorname{sen}^3 x}{\sqrt{\cos x}} dx$$

$$66. \int \operatorname{sen} \ln x \frac{dx}{x}$$

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

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

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

$$70. \int \frac{\cos^3 x}{\operatorname{sen}^3 x} dx$$

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

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

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

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

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

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

$$78. \int \frac{\operatorname{sen} x}{\cos^2 x} dx$$

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

$$80. \int \operatorname{sen}^3 x \cos^2 x dx$$

$$81. \int \frac{\cos x}{e^{\operatorname{sen} x}} dx$$

$$79. \int \operatorname{sen} 2 \frac{x}{\sqrt{2 - \cos 2x}} dx$$

INTEGRACIÓN POR PARTES

$$82. \int x \operatorname{sen} x dx$$

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

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

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

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

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

$$88. \int \operatorname{arcsen} x dx$$

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

$$90. \int x \operatorname{arctg} x dx$$

$$91. \int x^2 \operatorname{sen} x dx$$

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

$$93. \int \operatorname{sen}(\ln x) dx$$

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

$$95. \int \operatorname{arctg} x dx$$

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

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

$$98. \int \operatorname{sen}(\ln x) dx$$

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

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

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

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

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

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

$$105. \int e^x \operatorname{sen} x dx$$

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

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

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

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

$$110. \int x^2 \operatorname{sen} x dx$$

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

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

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

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

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

$$116. \int (x-3) \operatorname{sen} x dx$$

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

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

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

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

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

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

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

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

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

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

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

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. $\int (1+\operatorname{tag}^2 x^2) x dx$

161. $\int \operatorname{sen}^2 x dx$

162. $\int \operatorname{tag}^2 x dx$

163. $\int (3+\operatorname{tag}^2 x) dx$

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

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

$$\begin{array}{lll}
166. \int \frac{5 \cos x}{\sqrt{1 + \sin x}} dx & 167. \int \frac{e^{3x} + e^x + 1}{e^x} dx & 168. \int \frac{dx}{\sqrt{9 - x^2}} \\
169. \int \frac{3x^3 dx}{\sqrt{x^2 + 1}} & 170. \int \frac{5^x}{3^x} dx & 171. \int \frac{\ln x}{x^2} dx \\
172. \int \left(\frac{6x^2}{\sin^2 x^3} + \frac{4}{\cos^2 4x} \right) dx & 173. \int \frac{dx}{e^{2x+1}} & 174. \int \frac{dx}{x^2 + 4} \\
175. \int \frac{x^2 dx}{x^3 + 4} & 176. \int \frac{e^{3x}}{1 + e^{6x}} dx & 177. \int e^{-5x^2} (-5x) dx \\
178. \int \frac{\operatorname{tg} x}{\cos^2 x} dx & 179. \int \operatorname{tg} x dx & 180. \int (\cos 5x - 3 \sin 2x) dx \\
181. \int \frac{x dx}{1 + (x^2 + 3)^2} & 182. \int \frac{\ln x}{x} dx & 183. \int (x - e^x \cos x) dx \\
184. \int \frac{dx}{1 - \sin x} & 185. \int e^{\sin x} \cos x dx & 186. \int \sin^3 x \cos^3 x dx \\
187. \int x \cos(1 + x^2) dx & 188. \int \frac{dx}{\sqrt{x}(1 + \sqrt{x})} & 189. \int \frac{x + 9}{x^2 - 9} dx \\
190. \int \frac{5e^x}{2 + e^x} dx & 191. \int \frac{x - \sqrt{x}}{\sqrt{x} - \sqrt[3]{x}} dx & 192. \int \frac{dx}{1 - \sin^2 x} \\
193. \int \frac{x dx}{x + \sqrt{x}} & 194. \int \frac{\operatorname{tg}^3 x}{\cos^2 x} dx & 195. \int \frac{e^{\operatorname{tg} x}}{\cos^2 x} dx \\
196. \int \frac{2x}{9 + 5x^2} dx & 197. \int \frac{2x^3 + x^2 + 3x + 1}{x + 1} dx & 198. \int \frac{1 + \sin^2 x}{\sin x \cos x} dx \\
199. \int \frac{\cos x}{\sin^3 x} dx & 200. \int \frac{2x dx}{\sqrt{1 - x^4}} dx &
\end{array}$$

SOLUCIONES A LAS INTEGRALES

1. $\frac{x^4}{4} + c$
2. $\frac{x^4}{12} + c$
3. $\frac{x^5}{30} + c$
4. $\frac{x^4}{4} + 3x + c$
5. $\frac{x^3}{3} + x^2 - \ln|x| + c$
6. $\frac{x^3}{3} + \frac{x^2}{2} + \ln|x| + c$
7. $-\frac{1}{x} + c$
8. $-\frac{1}{4x^4} + c$
9. $-\frac{1}{x} + \frac{1}{2x^4} - \frac{3}{5x^5} + c$
10. $\sqrt[3]{x^4} + c$
11. $\frac{4\sqrt[4]{x^3}}{3} + c$
12. $2\sqrt[3]{x^4} + 2\sqrt{x^3} + c$
13. $\frac{6}{11}\sqrt[6]{x^{11}} + \frac{3}{4}\sqrt[3]{x^4} + c$
14. $\frac{x^3}{3} + 2\cos x + 8\operatorname{sen} x + c$
15. $e^x + \ln|x| + c$
16. $\frac{-2}{\sqrt{x}} + c$
17. $x + \ln|x| - \frac{3}{x} - \frac{3}{2x^2} + c$
18. $\operatorname{tg} x + \operatorname{sen} x + \frac{x^2}{2} + c$
19. $\operatorname{tg} x - x + c$
20. $\frac{2\sqrt{x^3}}{3} + 2\sqrt{x} + c$
21. $-\operatorname{cotg} x - \operatorname{tg} x + c$
22. $e^x + \ln|x| + c$
23. $\frac{15^x}{\ln 15} + c$
24. $\operatorname{arcsen} x - 3\operatorname{arctg} x + c$
25. $\operatorname{tg} x - \operatorname{cotg} x + c$
26. $-2\operatorname{cotg} x + \cos x + c$
27. $\frac{1}{3}\ln|3x+2| + c$
28. $-\ln|3-x| + c$
29. $\frac{1}{2}\ln|2+x^2| + c$
30. $\frac{-1}{(x+1)^2} + c$
31. $\frac{1}{3}\ln|1+x^3| + c$
32. $\ln|3+\operatorname{sen}^2 x| + c$
33. $\sqrt{x^2-6x+1} + c$
34. $\frac{2\sqrt{(2+e^x)^3}}{3} + c$
35. $\frac{\ln^2 x}{2} + c$
36. $\frac{2\sqrt{(x^3+1)^3}}{9} + c$
37. $-\frac{1}{5}\cos 5x + c$
38. $3\operatorname{sen} x^2 + c$
39. $\operatorname{arctg}(\operatorname{sen} x) + c$
40. $\operatorname{arc} \operatorname{sen}(\operatorname{tg} x) + c$
41. $\frac{e^{x^5}}{5} + c$
42. $\operatorname{arc} \operatorname{tg} x^4 + c$

43. $\frac{2^x}{\ln 2} + c$
44. $\frac{1}{3} \operatorname{arc} \operatorname{tg} \frac{x}{3} + c$
45. $\frac{e^{7x}}{7} + c$
46. $e^x - e^{-x} + c$
47. $2e^{\sqrt{x}} + c$
48. $-e^{-\operatorname{sen} x} + c$
49. $\operatorname{arc} \operatorname{sen} \left(\frac{x}{5} \right) + c$
50. $\frac{1}{3\sqrt{2}} \operatorname{arc} \operatorname{tg} \left(\frac{\sqrt{2} x}{3} \right) + c$
51. $\frac{(2x+5)^{10}}{20} + c$
52. $\frac{(\operatorname{arc} \operatorname{tg} x)^4}{4} + c$
53. $\frac{\operatorname{sen}^6 x}{6} + c$
54. $3 \sqrt[3]{\operatorname{sen} x} + c$
55. $\ln |\ln |x|| + c$
56. $2 \operatorname{sen} \sqrt{x} + c$
57. $\frac{e^{2x}}{2} + 2x - \frac{e^{-2x}}{2} + c$
58. $\frac{(\operatorname{arc} \operatorname{cos} x)^2}{2} + c$
59. $\ln |5 + x \ln x| + c$
60. $\frac{\operatorname{tg}^3 x}{3} + \frac{\operatorname{tg}^2 x}{2} + c$
61. $\frac{-2 \sqrt{(\operatorname{cos} x)^3}}{3} + c$
62. $e^{e^x} + c$
63. $\operatorname{sen} e^x + c$
64. $\operatorname{arc} \operatorname{tg} (x+1) + c$
65. $-2 \sqrt{\operatorname{cos} x} + \frac{2 \sqrt{(\operatorname{cos} x)^5}}{5} + c$
66. $-\operatorname{cos} (\ln x) + c$
67. $\frac{1}{3\sqrt{2}} \operatorname{arc} \operatorname{tg} \left(\frac{x^3}{\sqrt{2}} \right) + c$
68. $\operatorname{arc} \operatorname{sen} (\ln x) + c$
69. $\frac{4 \sqrt{(3+\sqrt{x})^3}}{3} + c$
70. $-\frac{1}{2 \operatorname{sen}^2 x} - \ln |\operatorname{sen} x| + c$
71. $-\frac{1}{4} e^{-x^4} + c$
72. $-\frac{1}{e^x - 1} + c$
73. $\frac{1}{2} \operatorname{arc} \operatorname{sen} x^2 + c$
74. $\frac{1}{3} \sqrt{(1+x^2)^3} + c$
75. $-\frac{\ln^2 (\operatorname{cos} x)}{2} + c$
76. $\frac{\ln^2 (\ln x)}{2} + c$
77. $\frac{1}{2} e^{2 \operatorname{tg} x} + c$
78. $\frac{1}{\operatorname{cos} x} + c$
79. $-\sqrt{2 - \operatorname{cos} 2x} + c$
80. $-\frac{\operatorname{cos}^3 x}{3} + \frac{\operatorname{cos}^5 x}{5} + c$
81. $e^{-\operatorname{sen} x} + c$
82. $-x \operatorname{cos} x + \operatorname{sen} x + c$
83. $\frac{x \operatorname{sen} 3x}{3} + \frac{\operatorname{cos} 3x}{9} + c$
84. $\frac{x^3 \ln x}{3} - \frac{x^3}{9} + c$
85. $x^3 e^x - 3x^2 e^x + 6x e^x + 6 e^x + c$
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. $\frac{x^2 \arctg x}{2} - \frac{x}{2} + \frac{\arctg x}{2} + c$
91. $-x^2 \cos x + 2x \operatorname{sen} x + 2 \cos x + c$
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. $x \arctg x - \frac{1}{2} \ln |1+x^2| + c$
96. $x^2 \operatorname{sen} x + 2x \cos x - 2 \operatorname{sen} x + c$
97. $2x \sqrt{1+x} - \frac{4 \sqrt{(1+x)^3}}{3} + c$
98. $\frac{x \operatorname{sen}(\ln x) - x \cos(\ln x)}{2} + c$
99. $2x \operatorname{tg} x + 2 \ln |\cos x| + c$
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. $\frac{e^x \cos x + e^x \operatorname{sen} x}{2} + c$
105. $\frac{e^x \operatorname{sen} x - e^x \cos x}{2} + c$
106. $-\frac{x e^{-3x}}{3} - \frac{e^{-3x}}{9} + c$
107. $x \operatorname{tg} x + \ln |\cos x| + c$
108. $x \operatorname{sen} x + \cos x + c$
109. $-\frac{\ln x}{2x^2} - \frac{1}{4x^2} + c$
110. $-x^2 \cos x + 2x \operatorname{sen} x + 2 \cos x + c$
111. $\frac{e^{-3x} \operatorname{sen} x}{10} - \frac{3e^{-3x} \cos x}{10} + c$
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. $-(x - 3) \cos x + \operatorname{sen} x + c$
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. $-e^{-x} + \frac{3\sqrt[3]{x^4}}{4} - \frac{3\sqrt[3]{(2x)^2}}{4} - \frac{1}{x} + c$
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. $\operatorname{arc} \operatorname{sen} \left(\frac{x}{3}\right) + c$

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

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

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

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

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. $e^{\operatorname{tg} x} + c$

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

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

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

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

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

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

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

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

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

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

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

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

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

192. $\operatorname{tg}(x) + c$

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

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

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

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