



## 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.  $\int (x^2 - 2 \sin x + 8 \cos x) dx$

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

19.  $\int \lg^2 x dx$

20.  $\int \left( \sqrt{x} + \frac{1}{\sqrt{x}} \right) dx$

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

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

26.  $\int \frac{2 - \sin^3 x}{\sin^2 x} dx$

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

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.  $\int \sin 5x dx$

38.  $\int 6x \cos x^2 dx$

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

40.  $\int \frac{dx}{\cos^2 x \sqrt{1 - \tan^2 x}}$

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

49.  $\int \frac{dx}{\sqrt{25-x^2}}$

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

51.  $\int (2x+5)^9 dx$

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

53.  $\int \sin^5 x \cos x dx$

54.  $\int \frac{\cos x}{\sqrt[3]{\sin^2 x}} dx$



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.  $\int \arcsen x \, dx$

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

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

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

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.  $\int \frac{5 \cos x}{\sqrt{1 + \sin x}} dx$
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.  $\int \frac{2x dx}{\sqrt{1 - x^4}} dx$

selectividad-cgranada.com

Résidence ESSAADA, entrée 7, 1er étage, Av. Hassan II, Rabat

Tel: 037 20 12 21 & 037 20 47 43

info@selectividad-cgranada.com



## 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.  $-\cotg x - \operatorname{tg} x + c$
22.  $e^x + \ln|x| + c$
23.  $\frac{15^x}{\ln 15} + c$
24.  $\arcsen x - 3\operatorname{arctg} x + c$
25.  $\operatorname{tg} x - \cotg x + c$
26.  $-2\cotg x + \cos x + c$
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.  $\frac{2^x}{\ln 2} + c$

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

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

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.  $\frac{1}{3} \arctg \frac{x}{3} + c$

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

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

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

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

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

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

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

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

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

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

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.  $x e^x - e^x + c$

89.  $\frac{x \sqrt{(1+2x)^3}}{3} - \frac{1}{15} \sqrt{(1+2x)^5} + c$

91.  $-x^2 \cos x + 2x \operatorname{sen} x + 2 \cos x + c$

93.  $2\sqrt{x} e^{\sqrt{x}} - 2e^{\sqrt{x}} + c$

95.  $x \operatorname{arc} \operatorname{tg} x - \frac{1}{2} \ln |1+x^2| + c$

97.  $2x \sqrt{1+x} - \frac{4 \sqrt{(1+x)^3}}{3} + c$

99.  $2x \operatorname{tg} x + 2 \ln |\cos x| + c$

101.  $-e^{-x} (x^2 - x) - e^{-x} (2x - 1) - 2e^{-x} + c$

103.  $x \ln x - x + c$

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

107.  $x \operatorname{tg} x + \ln |\cos x| + c$

109.  $-\frac{\ln x}{2x^2} - \frac{1}{4x^2} + c$

111.  $\frac{e^{-3x} \operatorname{sen} x}{10} - \frac{3e^{-3x} \cos x}{10} + c$

113.  $\frac{x^4}{4} \ln |x| - \frac{x^4}{16} + c$

115.  $-2x \sqrt{1-x} - \frac{4 \sqrt{(1-x)^3}}{3} + c$

117.  $x \ln \left| x + \sqrt{1+x^2} \right| - \sqrt{1+x^2} + c$

119.  $\frac{x^2}{2} \operatorname{arcsen} x^2 + \frac{1}{2} \sqrt{1-x^4} + c$

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.  $2x - 7 \ln |x+2| + c$

123.  $\frac{4}{5} \ln |x+3| + \frac{1}{5} \ln |x-2| + c$

125.  $\ln |x| + \ln |x-1| - \frac{2}{x-1} + c$

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

88.  $x \operatorname{arc} \operatorname{sen} x + \sqrt{1-x^2} + c$

90.  $\frac{x^2 \operatorname{arc} \operatorname{tg} x}{2} - \frac{x}{2} + \frac{\operatorname{arc} \operatorname{tg} x}{2} + c$

92.  $x (\ln x)^2 - 2x \ln x + 2x + c$

94.  $\frac{2 \sqrt{x^3} \ln x}{3} - \frac{4 \sqrt{x^3}}{9} + c$

96.  $x^2 \operatorname{sen} x + 2x \cos x - 2 \operatorname{sen} x + c$

98.  $\frac{x \operatorname{sen}(\ln x) - x \cos(\ln x)}{2} + c$

100.  $2\sqrt{x} \ln x - 4\sqrt{x} + c$

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

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

106.  $-\frac{x e^{-3x}}{3} - \frac{e^{-3x}}{9} + c$

108.  $x \operatorname{sen} x + \cos x + c$

110.  $-x^2 \cos x + 2x \operatorname{sen} x + 2 \cos x + c$

112.  $\frac{x^2}{2} (\ln x)^2 - \frac{x^2}{2} \ln x + \frac{x^2}{4} + c$

114.  $\ln |x| \cdot \ln (\ln |x|) - \ln |x| + c$

116.  $-(x-3) \cos x + \operatorname{sen} x + c$

118.  $-\sqrt{1-x^2} \operatorname{arcsen} x + x + c$

120.

122.  $\frac{1}{4} \ln \left| \frac{x-2}{x+2} \right| + c$

124.  $2 \ln |x+2| - 2 \ln |x+3| + c$

126.  $\frac{1}{2} \ln |x| - \frac{1}{2} \ln |x+2| + c$

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.  $\operatorname{arc} \operatorname{sen} \left( \frac{x}{3} \right) + c$





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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

192.  $\tg(x) + c$

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

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

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

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

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

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

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

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

Résidence ESSAADA, entrée 7, 1er étage, Av. Hassan II, Rabat

Tel: 037 20 12 21 - 037 20 47 43

info@selectividad-cgranada.com