

CÁLCULO 2

TALLER PROPUESTO DE INTEGRALES INDEFINIDAS

www.mathspace.jimdo.com

1. $\int \sqrt[5]{x^2} dx$	2. $\int \frac{89}{\sqrt[3]{x}} dx$	3. $\int \frac{\pi}{5x} dx$
4. $\int \sqrt[7]{777x^2} dx$	5. $\int \left(\frac{5}{x^9} - \frac{4}{x^7} + \frac{66}{x^{95}} \right) dx$	6. $\int \left(\frac{x^4}{\sqrt{a^2+b^2}} + \frac{12x}{\sqrt{a}} \right) dx$
7. $\int \left(\frac{3x^6+x^{32}-2x^2}{x^2} \right) dx$	8. $\int y^3 \left(3y^2 - 2y^{5/2} + \frac{11}{y^6} \right) dy$	9. $\int \left(x - \frac{1}{x^7} \right) \sqrt{x} \sqrt[3]{x} dx$
10. $\int \frac{(x+7)(x-7)}{\sqrt[3]{x}} dx$	11. $\int (ax^2 - bx)^2 dx$	12. $\int (ax^2 - bx - c)^2 dx$
13. $\int e^{\ln(x)} dx$	14. $\int (a^2y^2 - b^3)^3 dy$	15. $\int t^3 (at^4 - b^5)^2 dt$
16. $\int e^{\ln(x^5)} dx$	17. $\int (a + bx)^4 dx$	18. $\int (a - bx)^4 dx$
19. $\int \ln(e^{x^6}) dx$	20. $\int \ln(e^{\sqrt{z}}) dz$	21. $\int e^{\ln(\frac{1+x^2}{x^2})} dx$
22. $\int (t - \tan(t)) dt$	23. $\int \cos^2(x/4) dx$	24. $\int (1 + \sqrt{x})^5 dx$
25. $\int \frac{12}{\sqrt{12-z^2}} dz$	26. $\int \frac{1}{\sqrt{x^2-7}} dx$	27. $\int \frac{1}{\sqrt{t^2+17}} dt$
28. $\int \frac{1}{x^2-6} dx$	29. $\int (\sin^2(t) + \cos^2(t) - 1) dt$	30. $\int (\tan^2(x) + 1) dx$
31. $\int \frac{4x}{\sqrt{2x^2+8}} dx$	32. $\int \sqrt{x^2 - 5} dx$	33. $\int \frac{1-\cos^2(x)}{\sin^2(x)} dx$
34. $\int \sqrt{1 - \sin^2(x)} dx$	35. $\int (1^x + 3^x)^3 dx$	36. $\int (1^0 + 3^0)^n dx$
37. $\int \frac{dx}{3-x}$	38. $\int \sqrt{\frac{1}{2} - x^2} dx$	39. $\int \frac{1+\tan^2(x)}{\sec^2(x)} dx$
40. $\int (a + bx)^{10} dx$	41. $\int \frac{1}{(3x^2+2)^{2/3}} dx$	42. $\int (4y - 4)^{1/2} dy$
43. $\int \frac{x^2}{x^3+4} dx$	44. $\int (t+2)\sin(t^2 + 4t - 8) dt$	45. $\int w \sin(1 + w^2) dw$
46. $\int y \cot(y^2 + 1) dy$	47. $\int w \sqrt{a + w^4} dw$	48. $\int \frac{t - \arctan(2t)}{1+4t^2} dt$
49. $\int \frac{1}{(a+bx)^{-1/5}} dx$	50. $\int 7 \sqrt{\frac{\arcsen(t)}{1-t^2}} dt$	51. $\int \frac{dx}{\sqrt{(1+x^2)\ln x+\sqrt{1+x^2} }}$
52. $\int \frac{\cot(\ln(t))}{t} dt$	53. $\int \frac{10}{x(\ln(x))^3} dx$	54. $\int e^{-x+2} dx$
55. $\int t^3 e^{t^4} dt$	56. $\int (e^x + 1)^3 e^{2x} dx$	57. $\int \frac{e^x - 1}{e^x + 1} dx$
58. $\int 5 \frac{x^2+1}{x-1} dx$	59. $\int \frac{t+2}{t+1} dt$	60. $\int \tan^5(x) \sec^2(x) dx$
61. $\int \sin(x) \sec^2(x) dx$	62. $\int \cos(t) \sin^4(t) dt$	63. $\int \frac{\sec^5(x)}{\csc(x)} dx$
64. $\int \sec^2(2x) e^{\tan(2x)} dx$	65. $\int \frac{1}{x\sqrt{4-9(\ln(x))^2}} dx$	66. $\int \frac{1}{\sqrt{e^x-1}} dx$

$67. \int \frac{x^2+2x+2}{x+1} dx$	$68. \int \frac{e^{2x}}{\sqrt{e^x+1}} dx$	$69. \int \frac{\ln(2x)}{\ln(4x)} dx$
$70. \int \sqrt{a-bx} dx$	$71. \int \frac{x}{x^2-5} dx$	$72. \int \frac{a}{a-x} dx$
$73. \int \frac{x}{a+bx} dx$	$74. \int \frac{s}{(s+1)^2} ds$	$75. \int \frac{\sqrt{x+\ln(x)}}{x} dx$
$76. \int \frac{1}{\sin^2(4x+2)} dx$	$77. \int \sqrt{1-\sin(2x)} dx$	$78. \int \frac{\arctan(\sqrt{x})}{(\sqrt{x})(1+x)} dx$
$79. \int \sqrt{\frac{a+x}{a-x}} dx$	$80. \int \sqrt{\frac{\sin^2 x \cos^2 x}{a^2 \sin^2 x + b^2 \sin^2 x}} dx$	$81. \int \frac{1}{x \ln(x) \ln(\ln(x))} dx$
$82. \int t \sec^2(t) dt$	$83. \int x^2 \sin(x) dx$	$84. \int \ln(a^2 + x^2) dx$
$85. \int \ln^2(x) dx$	$86. \int x^2 \arctan(x) dx$	$87. \int \arccos(2x) dx$
$88. \int \frac{\arcsen(\sqrt{x})}{\sqrt{x}} dx$	$89. \int x \arcsen(2x^2) dx$	$90. \int x^3 e^{-x^2} dx$
$91. \int (x^2 - 2x + 5) e^{-x} dx$	$92. \int e^{ax} \sin(bx) dx$	$93. \int x \sqrt{1+x} dx$
$94. \int \frac{x^2}{\sqrt{1+x}} dx$	$95. \int \frac{x}{e^{-x}} dx$	$96. \int x^2 \ln \sqrt{1-x} dx$
$97. \int x(3x+1)^7 dx$	$98. \int \ln(x + \sqrt{1+x^2}) dx$	$99. \int \arcsen(x) dx$
$100. \int \cos(\ln(x)) dx$	$101. \int \frac{x \cos(x)}{\sin^2(x)} dx$	$102. \int \sin(x) \ln(\tan(x)) dx$
$103. \int (2 - 3\cos^2(2x)) dx$	$104. \int \sin^3(3x) dx$	$105. \int \cos^5(x) \sqrt{\sin(x)} dx$
$106. \int \sin(3x) \sin(5x) dx$	$107. \int \sin\left(\frac{x}{3}\right) \cos\left(\frac{2x}{3}\right) dx$	$108. \int \tan^5(x) dx$
$109. \int \sin\left(2x - \frac{\pi}{6}\right) \sin(3x + \frac{\pi}{4}) dx$	$110. \int \cos(x) \cos^2(3x) dx$	$111. \int \frac{1}{\sin^2(x) \cos(x)} dx$
$112. \int \cos(x) \cos(2x) \cos(3x) dx$	$113. \int \frac{\sin\left(x + \frac{\pi}{4}\right)}{\sin(x) \cos(x)} dx$	$114. \int \csc^3(x) dx$
$115. \int \frac{1}{x^2+2x+5} dx$	$116. \int \frac{1}{4x^2+4x+2} dx$	$117. \int \frac{1}{\sqrt{x^2+2x+2}} dx$
$118. \int x^2 \sqrt{9-x^2} dx$	$119. \int \frac{1}{(1+x^2)^{3/2}} dx$	$120. \int \frac{x^2}{(1-x^2)^{3/2}} dx$
$121. \int \frac{1}{x\sqrt{x^2+9}} dx$	$122. \int \frac{dx}{x^3\sqrt{x^2-9}}$	$123. \int \frac{1}{\sqrt{(x^2+4x+13)^3}} dx$
$124. \int \frac{1}{(x-1)(x+3)} dx$	$125. \int \frac{4x-2}{x^3-x^2-2x} dx$	$126. \int \frac{1}{x^2-25} dx$
$127. \int \frac{1}{x^2-4x+4} dx$	$128. \int \frac{2x^2+3}{x^3-2x^2+x} dx$	$129. \int \frac{x^4}{x^4+1} dx$