

Hoja 21: Integrales indefinidas

Integrales inmediatas funciones elementales

April 22, 2014

Calcula las integrales:

1. $\int (5x^4 + 3x^2) dx$
2. $\int (\sin x + 4) dx$
3. $\int (2 \cos x + 3x) dx$
4. $\int \frac{1}{x^4} dx$
5. $\int 3\sqrt[3]{x^2} dx$
6. $\int \left(\frac{1}{x} - 2x^3\right) dx$
7. $\int \frac{1}{(3x^2 + 5)^4} \cdot 6x dx$
8. $\int 2x\sqrt{x^2 - 1} dx$
9. $\int x(1 + 2x^2) dx$
10. $\int x^2(2 - 2x^3) dx$
11. $\int \sqrt{3 + 2x} dx$
12. $\int (x^3 + 1)^2 dx$
13. $\int \frac{2x}{x^2 + 5} dx$
14. $\int \frac{x}{(3x^2 - 2)^3} dx$
15. $\int \frac{x}{\sqrt[3]{2 - x^2}} dx$
16. $\int 2^x dx$
17. $\int 2^{3x^2 - 1} \cdot 6x dx$
18. $\int e^{5x} dx$
19. $\int 5x^2 e^{x^3} dx$
20. $\int 5^{-\frac{x}{2}} dx$
21. $\int e^{x+2} dx$
22. $\int \left(\frac{1}{3}\right)^{6x} dx$
23. $\int (e^{-2x} + e^{x-5}) dx$
24. $\int 3^{x^2-3} \cdot 2x dx$
25. $\int \frac{7^{2x-2}}{3} dx$
26. $\int \sin 2x dx$
27. $\int \cos(x + 3) dx$
28. $\int \frac{\sin \frac{x}{2}}{2} dx$
29. $\int \frac{1}{\cos^2(x + 3)} dx$
30. $\int -2 \sin(2x + 1) dx$
31. $\int (x + 1) \cos(x^2 + 2x) dx$
32. $\int \frac{dx}{\sqrt{1 - 25x^2}}$
33. $\int \frac{1}{1 + (x - 2)^2} dx$
34. $\int (5x^3 + 2x^2 - 3) dx$
35. $\int (x - 3)^2 dx$
36. $\int (x - 1)^3 dx$
37. $\int \left(-\frac{1}{4}x^6 - \frac{1}{4}x^3 + 6x^2 + 1\right) dx$
38. $\int (2\sqrt{x} - 3\sqrt[3]{x}) dx$
39. $\int \left(\frac{4}{\sqrt{x}} + \sqrt{x} - 9\sqrt[5]{x}\right) dx$
40. $\int \left(\frac{1}{x} + \frac{2}{x^2} + \frac{3}{x^3}\right) dx$
41. $\int \left(\frac{2}{x + 3} + \frac{7}{x - 4}\right) dx$
42. $\int (e^{x-3} + 3^x) dx$
43. $\int 4 \sin(2x - \pi) dx$
44. $\int 3 \sec^2 \frac{x}{5} dx$