

En los siguientes ejercicios realice la integral que se indica:

1. $\int \sqrt{1-4y} dy$

2. $\int x^2 (x^3 - 1)^{10} dx$

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

4. $\int x\sqrt{x+2} dx$

5. $\int \sqrt{3-2xx^2} dx$

6. $\int \cos 4\theta d\theta$

7. $\int \frac{1}{2} t \sin 4t^2 dt$

8. $\int \cos x (2 + \sin x)^5 dx$

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

10. $\int 2 \sin x \sqrt[3]{1 + \cos x} dx$

11. $\int \sin^3 \theta \cos \theta d\theta$

12. $\int \frac{\sec^2 3\sqrt{t} dt}{\sqrt{t}}$

13. $\int \frac{(y+3)dy}{(3-y)^{2/3}}$

14. $\int \frac{x^3 dx}{\sqrt{1-2x^2}}$

15. $\int \tan x dx$

16. $\int e^{kx} dx,$

17. $\int \sec x dx$

18. $\int \cot x dx$

k es una constante arbitraria

19. $\int \csc x dx$

20. $\int \frac{y^3}{(1-2y^4)^5} dy$

21. $\int \frac{2rdr}{(1-r)^{2/3}}$

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

23. $\int \frac{y+3}{(3-y)^{2/3}} dy$

24. $\int \left(t + \frac{1}{t}\right)^{3/2} \left(\frac{t^2-1}{t^2}\right) dt$

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

26. $\int \frac{s}{2s+3} ds$

27. $y = \int x(x^2+9)^{1/2} dx$

28. $\int (x^2+2)/(x^3+6x-1) dx$

29. $\int [(3x^2-6)/\sqrt{x^3-6x}] dx$

30. $\int x^2 \sin(x^3+4) dx$