

Calcule as integrais a seguir:

1. $\int_1^3 dx$

2. $\int_0^4 \frac{1}{2} dx$

3. $\int_{-1}^1 5 dx$

4. $\int_0^1 (x+3) dx$

5. $\int_{-1}^1 (2x+1) dx$

6. $\int_{-2}^1 (x^2-1) dx$

7. $\int_0^2 (x^2+3x-3) dx$

8. $\int_1^3 \frac{1}{x^3} dx$

9. $\int_0^1 (5x^3 - \frac{1}{2}) dx$

10. $\int_{-2}^{-1} (\frac{1}{x^2} + x) dx$

11. $\int_0^4 \sqrt{x} dx$

12. $\int_0^8 \sqrt[3]{x} dx$

13. $\int_1^4 \frac{1}{\sqrt{x}} dx$

14. $\int_1^3 (5 + \frac{1}{t^2}) dt$

15. $\int_1^2 \frac{(x-1)^3}{x^2} dx$

16. $\int_0^1 (x + \sqrt[4]{x}) dx$

17. $\int_1^2 (\frac{1+x}{x^3}) dx$

18. $\int_1^4 (\frac{1+x}{\sqrt{x}}) dx$

19. $\int_1^2 \frac{1+t^2}{t^4} dt$

20. $\int_1^3 (1 + \frac{1}{x}) dx$

21. $\int_1^4 \sqrt{t} (t^3 - 1) dt$

22. $\int_1^4 \sqrt{\frac{5}{h}} dh$

23. $\int_0^1 (\frac{e^x}{4} - 5 \cos x) dx$

24. $\int_1^{64} \frac{1 + \sqrt[3]{s}}{\sqrt{s}} ds$

Respostas:

1. R: 2

2. R: 2

3. R: 10

4. R: 7/2

5. R: 2

6. R: 0

7. R: 8/3

8. R: 4/9

9. R: 3/4

10. R: -1

11. R: 16/3

12. R: 12

13. R: 2

14. R: 32/3

15. R: -2 + 3 ln2

16. R: 13/10

17. R: 7/8

18. R: 20/3

19. R: 19/24

20. R: 2 + ln3

21. R: 980/9

22. R: $2\sqrt{5}$

23. R: $\frac{e-1}{4} - 5 \sin(1)$

24. R: 256/5