

## IMPROPRIUS INTEGRÁL

1.  $\mathbf{B} \int_3^{\infty} \frac{2}{x^4} dx$   $\left[ \frac{2}{81}; D_f = R \setminus \{0\} \right]$
2.  $\mathbf{B} \int_{-\infty}^{-3} \frac{3}{4x^2} dx$   $\left[ \frac{1}{4}; D_f = R \setminus \{0\} \right]$
3.  $\mathbf{B} \int_5^{\infty} \frac{3}{7x^3} dx$   $\left[ \frac{3}{350}; D_f = R \setminus \{0\} \right]$
4.  $\mathbf{B, V} \int_1^{\infty} \frac{6}{5\sqrt[3]{x}} dx$   $[\infty; D_f = R \setminus \{0\}]$
5.  $\mathbf{B} \int_{-\infty}^{-1} \frac{4}{9x} dx$   $[-\infty; D_f = R \setminus \{0\}]$
6.  $\mathbf{B, V} \int_1^{\infty} \frac{10}{2x+4} dx$   $[\infty; D_f = R \setminus \{-2\}]$
7.  $\mathbf{B, V} \int_e^{\infty} \frac{1}{x \cdot \ln x} dx$   $[\infty; D_f = (0; 1) \cup (1; \infty)]$
8.  $\mathbf{B, V} \int_e^{\infty} \frac{1}{x \cdot \ln^2 x} dx$   $[1; D_f = (0; 1) \cup (1; \infty)]$
9.  $\mathbf{B} \int_1^{\infty} \frac{2}{(x+1)^5} dx$   $\left[ \frac{1}{32}; D_f = R \setminus \{-1\} \right]$
10.  $\mathbf{B, V} \int_6^{\infty} \frac{5}{(2x-3)^4} dx$   $\left[ \frac{5}{4374}; D_f = R \setminus \left\{ \frac{3}{2} \right\} \right]$
11.  $\mathbf{B} \int_0^{\infty} e^{-2x} dx$   $\left[ \frac{1}{2}; D_f = R \right]$
12.  $\mathbf{B} \int_{-\infty}^{-1} e^{-4x+3} dx$   $[\infty; D_f = R]$

13. **B, V**  $\int_0^{\infty} 4e^{-5x} dx$   $\left[\frac{4}{5}; D_f = R\right]$
14. **B, V**  $\int_{-\infty}^4 5e^{-x+4} dx$   $[\infty; D_f = R]$
15. **B, V**  $\int_3^{\infty} \frac{x}{(x^2 + 1)^2} dx$   $\left[\frac{1}{20}; D_f = R\right]$
16. **B, V**  $\int_1^{\infty} \frac{3}{(2x + 1)^4} dx$   $\left[\frac{1}{54}; D_f = R \setminus \left\{-\frac{1}{2}\right\}\right]$
17. **B, V**  $\int_{-\infty}^1 \frac{5}{7x - 9} dx =$   $[-\infty; D_f = R \setminus \left\{\frac{9}{7}\right\}]$
18. **B, V**  $\int_{-\infty}^{-1} \frac{x}{x^2 + 1} dx$   $[-\infty; D_f = R]$
19. **B, V**  $\int_{-\infty}^{-6} -\frac{2}{(8x - 10)^2} dx$   $\left[-\frac{1}{232}; D_f = R \setminus \left\{\frac{5}{4}\right\}\right]$
20. **V**  $\int_{-\infty}^1 \frac{2}{\sqrt[3]{4 - 3x}} dx$   $[\infty; D_f = R \setminus \left\{\frac{4}{3}\right\}]$
21. **V**  $\int_0^{\infty} \frac{2}{\sqrt[5]{(5x + 1)^4}} dx =$   $[\infty; D_f = R \setminus \left\{-\frac{1}{5}\right\}]$
22. **V**  $\int_3^{\infty} \left(\frac{1}{\sqrt{x+1}} + \frac{1}{(x+1)^2}\right) dx$   $[\infty; D_f = ] - 1; \infty[$
23. **V**  $\int_{-\infty}^{\infty} e^{3x} dx$   $[\infty; D_f = R]$
24. **V**  $\int_{-\infty}^{\infty} \frac{3x}{x^2 + 2} dx$   $[\infty - \infty; \text{divergens}; D_f = R]$
25. **V**  $\int_{-\infty}^{\infty} 5xe^{-3x^2} dx$   $[0; D_f = R]$

$$26. \quad \mathbf{V} \int_{-\infty}^{\infty} \frac{e^{5x}}{e^{5x} + 3} dx \quad [\infty; D_f = \mathbb{R}]$$

$$27. \quad \mathbf{V} \int_{-\infty}^{\infty} x e^{-x^2} dx \quad [0; D_f = \mathbb{R}]$$