

Интегрирования дробно-рациональных выражений

1. $\int \frac{x-1}{(x+1)(x+3)} dx.$

2. $\int \frac{x}{x^2-6x+5} dx.$

3. $\int \frac{3x+1}{x^2+4x-5} dx.$

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

5. $\int \frac{x^5-2}{x^3-4x} dx$

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

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

8. $\int \frac{x^2+3x-1}{(x-4)^2(x+3)^2} dx.$

10. $\int \frac{e^x-1}{e^x+1} dx.$

11. $\int \frac{1}{e^x(3+e^{-x})} dx.$

9. $\int \frac{3x-4}{x^3-x} dx.$

10. $\int \frac{1}{(9x^2+6x+4)(x+3)} dx.$

11. $\int \frac{x^2-3x+1}{(x^2+4x+1)(x-2)} dx. \int \frac{x^3+2x^2-1}{(x^2+3)(x-2)} dx$

Дома

1. $\int \frac{3x+1}{x^2+4x-5} dx$

2. $\int \frac{x^2-6x+3}{(x-1)(x+2)(x-4)} dx$

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

$$4. \int \frac{x - 7}{(x + 3)^2(x + 4)} dx$$

$$5. \int \frac{3x^4 - 4}{x^3 - 4x^2} dx$$

$$6. \int \frac{x - 1}{(x^2 + 6)(x + 1)} dx$$

$$7. \int \frac{dx}{e^x(3 + e^{-x})}$$