

No calculators will be allowed and no partial credit will be given.

1. Express the indefinite integral $\int -\frac{4}{(x-2)(x+2)} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
2. Express the indefinite integral $\int -\frac{2x}{(x-3)(x-2)} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
3. Express the indefinite integral $\int \frac{-2x-1}{(x+3)(x+4)} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
4. Express the indefinite integral $\int -\frac{2}{x^2-16} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
5. Express the indefinite integral $\int -\frac{3x}{x^2-x-12} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
6. Express the indefinite integral $\int \frac{4x-3}{(x-4)(x-1)} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
7. Express the indefinite integral $\int \frac{5x}{(x+4)^2} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
8. Express the indefinite integral $\int \frac{5x+2}{(x-2)^2} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
9. Express the indefinite integral $\int -\frac{2x}{x^2-8x+16} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.
10. Express the indefinite integral $\int \frac{3x+1}{x^2+8x+16} dx$ in terms of elementary functions. Use the symbol C to denote an arbitrary constant.

1. $\ln(|x + 2|) - \ln(|x - 2|) + C$
2. $4 \ln(|x - 2|) - 6 \ln(|x - 3|) + C$
3. $5 \ln(|x + 3|) - 7 \ln(|x + 4|) + C$
4. $\frac{\ln(|x + 4|)}{4} - \frac{\ln(|x - 4|)}{4} + C$
5. $-\frac{9 \ln(|x + 3|)}{7} - \frac{12 \ln(|x - 4|)}{7} + C$
6. $\frac{13 \ln(|x - 4|)}{3} - \frac{\ln(|x - 1|)}{3} + C$
7. $5 \ln(|x + 4|) + \frac{20}{x + 4} + C$
8. $5 \ln(|x - 2|) - \frac{12}{x - 2} + C$
9. $\frac{8}{x - 4} - 2 \ln(|x - 4|) + C$
10. $3 \ln(|x + 4|) + \frac{11}{x + 4} + C$