

10. Gyak. Integrál

1. (a) $\int \frac{\sqrt[3]{x^2} \cdot \sqrt{x^3}}{\sqrt[4]{x}} dx$
- (b) $\int \frac{(2x+1)^2}{x} dx$
- (c) $\int \frac{(x-2)^3}{x^2} dx$
- (d) $\int (2x-3)^{10} dx$
- (e) $\int \frac{3}{(2x-4)^4} dx$
- (f) $\int \sqrt[3]{(2x+1)^2} dx$
- (g) $\int \frac{3}{\sqrt[4]{x+2}} dx$
- (h) $\int \frac{x^2-3x+4}{\sqrt{x}} dx$
2. (1) $\int \sin(3x+2) dx$
- (2) $\int \cos(2x-1) dx$
- (3) $\int \sin^2 x dx$
- (4) $\int \cos^2 x dx$
- (5) $\int \sin 2x \cdot \sin 3x dx$
- (6) $\int \cos 2x \cdot \cos 4x dx$
- (7) $\int \sin 5x \cdot \cos 3x dx$
- (8) $\int 2 \sinh(4x+2) dx$
- (9) $\int \sinh^4 x dx$
- (10) $\int \cosh^4 x dx$
- (11) $\int \sin^5 x dx$
- (12) $\int \cos^3 x dx$
- (13) $\int 3^x \cdot 2^{2x} dx$
- (14) $\int \frac{3 \cdot e^x}{2 \cdot e^{3x}} dx$
- (15) $\int \frac{1}{2x+1} dx$
- (16) $\int \frac{3}{2+x^2} dx$
- (17) $\int \frac{2}{2+3x^2} dx$
- (18) $\int \frac{2}{\sqrt{4-x^2}} dx$
- (19) $\int \frac{2}{2-2x^2} dx$
- (20) $\int \frac{3}{\sqrt{4+x^2}} dx$
- (21) $\int \frac{2}{\sqrt{9x^2-1}} dx$
- (22) $\int \frac{3}{\sqrt{x^2-4}} dx$
- (23) $\int \sin x \cdot \cos^4 x dx$
- (24) $\int \cos x \cdot \sin^5 x dx$
- (25) $\int \frac{2x}{1+x^2} dx$
- (26) $\int e^{\sin x} \cdot \cos x dx$
- (27) $\int \frac{\ln^3 x}{x} dx$
- (28) $\int \frac{x^2}{\sqrt{1-x^6}} dx$
- (29) $\int \frac{\sin 2x}{3+\sin^2 x} dx$
- (30) $\int \frac{\cos x}{\sqrt{1+\sin x}} dx$
- (g) $\int 2^x \cdot \cos 2x dx$
- (h) $\int (3x^2+x) \sinh 2x dx$
- (i) $\int (2-x)^2 \cdot \cosh 3x dx$
- (j) $\int \cosh x \cdot \cos 5x dx$
- (k) $\int \frac{\sin x}{e^{3x}} dx$
3. (a) $\int \arcsin x dx$
- (b) $\int (x^2+2x) \cdot 3^{-x} dx$
- (c) $\int (2x+1) \cos 4x dx$
- (d) $\int (3x-1) \sin x \cdot \cos x dx$
- (e) $\int (2x-1) (\cos^2 x - \sin^2 x) dx$
- (f) $\int e^{-2x} \cdot \sin 3x dx$