

- 1 (1) $-4x^3 + 6x - 1$
(2) $-10 \sin 2x + 9 \cos 3x$
(3) $\frac{2}{x} - e^x$
(4) $2x \sin x + (x^2 + 1) \cos x$
(5) $(1 - x^2)/(1 + x + x^2)^2$
(6) $-\frac{2}{x(1 + \log x)^2}$
(7) $\frac{e^{2x}}{2\sqrt{1 - \frac{x^2}{4}}} + 2e^{2x} \sin^{-1} \frac{x}{2}$
(8) $\frac{1}{\sqrt{x^2 + 1}}$
(9) $x^{\sin x} \left(\cos x \log x + \frac{\sin x}{x} \right)$

2 (C は積分定数)

- (1) $\frac{1}{20}x^5 + x^3 + 5x + C$
(2) $-4 \cos x - 5 \sin x + C$
(3) $-\frac{1}{2} \cos 2x + C$
(4) $\log |x + 1| + C$
(5) $\frac{1}{15}(3x + 5)^5 + C$
(6) $-\frac{x^2}{4} + \frac{x^2}{2} \log x + C$
(7) $\log |x^4 + x + 8| + C$
(8) 2
(9) $-\frac{1}{4} \cos 2x + \sin x + C$