

$$16. \int \ln_e(e^{3x+4}) dx$$

$$= \int (3x+4) dx$$

$$= \frac{3}{2}x^2 + 4x + C$$

$$17. f'(x) = 0.2^{\frac{x}{3}} \quad \left(0, \frac{1}{3}\right)$$

$$f(x) = \int f'(x)$$

$$= \int 0.2^{\frac{x}{3}} dx$$

$$u = \frac{1}{3}x \quad du = \frac{1}{3} dx$$

$$= 3 \int \frac{1}{3} (0.2)^{\frac{x}{3}} dx$$

$$= 3 \int a^u du$$

$$= 3 \cdot \frac{1}{\ln a} \cdot a^u + C$$

$$= \frac{3}{\ln 0.2} \cdot 0.2^{\frac{x}{3}} + C$$