

$$\boxed{1} \int \frac{x + \sqrt{x}}{1 + \sqrt{x}} dx$$

$$\boxed{2} \int \frac{e^{x+1}}{e^x + 1} dx$$

$$\boxed{3} \int \sqrt[3]{3 \sin(x) - \sin(3x)} dx$$

$$\boxed{4} \int_1^{e^e} \frac{\log(x^{\log(x^x)})}{x^2} dx$$

$$\boxed{5} \int_{-\pi/2}^{\pi/2} \cos(20x) \sin(25x) dx$$

$$\boxed{6} \int_0^{2\pi} \sin(x) \cos(x) \tan(x) \cot(x) \sec(x) \csc(x) dx$$

$$\boxed{7} \int \frac{x \log(x) \cos(x) - \sin(x)}{x \log^2(x)} dx$$

$$\boxed{8} \int_1^2 (2^{x-1} + \log_2(2x)) dx$$

$$\boxed{9} \int_0^1 x^{2024} (1 - x^{2025})^{2025} dx$$

$$\boxed{10} \int_0^{10} x \left(x - \frac{1}{2}\right) (x - 1) dx$$

$$\boxed{11} \int_0^{20} \left\lfloor \frac{\lfloor x \rfloor}{2} \right\rfloor dx$$

$$\boxed{12} \int \sqrt[3]{x} \sqrt[4]{x} \sqrt[5]{x} \sqrt[6]{x} \sqrt[4]{\dots} dx$$

$$\boxed{13} \int \frac{e^{2x}(x^2 + x)}{(xe^x)^4 + 1} dx$$

$$\boxed{14} \int (\sec^4(x) - \tan^4(x)) dx$$

$$\boxed{15} \int_0^1 \sqrt{x(1-x)} dx$$

$$\boxed{16} \int \frac{\sin(4x) \cos(x)}{\cos(2x) \sin(x)} dx$$

$$\boxed{17} \int \sin(x) \sinh(x) dx$$

$$\boxed{18} \int_0^{\pi/3} \sin(x) \cos\left(\frac{\pi}{3} - x\right) dx$$

$$\boxed{19} \int \left(\cos(x) + \cos\left(x + \frac{2\pi}{3}\right) + \cos\left(x - \frac{2\pi}{3}\right) \right)^2 dx$$

$$\boxed{20} \int_0^1 \left(\sum_{k=1}^{\infty} (-1)^k x^{2k} \right) dx$$