1.
$$\lim_{x \to 0^+} (e^x - 1)^x =$$

$$2. \qquad \int \left(x^3 + \frac{1}{x} + \sin(x)\right) \, dx =$$

$$3. \qquad \int \sqrt[3]{x}^4 \, dx =$$

4.
$$\int \sec(x)\tan(x)\,dx =$$

 $1. \quad \lim_{x \to 0^+} x^x$

$$2. \qquad \int \left(x^5 - \frac{1}{x^2} + \cos(x)\right) dx =$$

$$3. \qquad \int \sqrt[3]{x} \, dx =$$

$$4. \qquad \int \frac{1}{1+x^2} \, dx =$$

 $1. \qquad \lim_{x \to \infty} (\ln x)^{1/x}$

$$2. \qquad \int \left(5x - \frac{1}{x} + \sec^2(x)\right) \, dx =$$

$$3. \qquad \int \frac{1}{\sqrt{x}} \, dx =$$

$$4. \qquad \int \frac{1}{\sqrt{1-x^2}} \, dx =$$

$$1. \quad \lim_{x \to \infty} \left(1 + \frac{1}{x} \right)^x$$

2.
$$\int (2+x-x^2+\csc^2(x)) dx =$$

$$3. \qquad \int \sqrt{x} \, dx =$$

$$4. \qquad \int \csc(x)\cot(x)\,dx =$$