1. Find using any appropriate method:  $\lim_{x\to\infty} (e^x - 1)^{1/x} =$ 

2. 
$$\int (x^{-1} + 1 + x + x^2) dx =$$

3. 
$$\int \left(\sqrt{x} + \sin(x)\right) dx =$$

$$4. \qquad \int \left(e^x + e^2\right) dx =$$

1. Find using any appropriate method:  $\lim_{x\to 0^+} (e^x - 1)^{1/x} =$ 

2. 
$$\int (x^6 + x^{1/2} + x + 2) dx =$$

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

4. 
$$\int \left(2e^x + \sec^2(x)\right) dx =$$

1. Find using any appropriate method:  $\lim_{x\to\infty} (e^x)^{1/(x+1)} =$ 

2. 
$$\int (3x^2 + 2 + 3x) \ dx =$$

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

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

1. Find using any appropriate method:  $\lim_{x\to 0} (x^2+1)^{1/x} =$ 

2. 
$$\int (20x^4 - x^{-1} + x^{-2}) dx =$$

$$3. \qquad \int \left(e + e^x\right) \, dx =$$

4. 
$$\int (\sqrt{x} + \cos(x)) dx =$$