1. $\displaystyle\lim_{x \to 1} x^{1/(x-1)} =$

2. $\displaystyle\int \left(8x^3 - \frac{1}{x} + x + 3 \right) dx =$

3. $\displaystyle\int \left(2\cos(x) + e^x \right) dx =$

4. $\displaystyle\int \left(\sqrt[5]{x} + \frac{1}{x^2} \right) dx =$

1. $\displaystyle\lim_{x \to 0^+} x^{(x^2)} =$

2. $\displaystyle\int \left(4x^3 - x + 2 + \frac{2}{x} \right) dx =$

3. $\displaystyle\int \left(e^x + \csc^2(x) \right) dx =$

4. $\displaystyle\int \left(\frac{1}{x^3} + \sqrt{x} \right) dx =$