1. Evaluate the limit
$$\lim_{x \to 3} \frac{x + x - 12}{x^2 - 9}$$

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2. Determine the infinite limit
$$\lim_{x \to -3^+} \frac{x + 2}{x + 3}$$

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3. Let $f(x)$ be such that $x \cos x \le f(x) \le x(1 + e^x)$ for all $x \ge 0$. Find $\lim_{x \to 0^+} f(x)$.