1. (1 pt) Enter a T or an F in each answer space below to indicate whether the corresponding statement is true or false. A statement is true only if it is true for all possibilities. You must get all of the answers correct to receive credit.

1. If \( f(x) \) is differentiable at \( a \), then \( f(x) \) is continuous at \( a \).

2. If \( p(x) \) is a polynomial, then the limit \( \lim_{x \to 6} p(x) \) is \( p(6) \).

3. If \( \lim [f(x)g(x)] \) exists, then the limit is \( f(6)g(6) \).

4. \( \lim_{x \to 3} \frac{x^2 + 2x - 15}{x^2 + 3x - 18} = \lim_{x \to 3} \frac{x^2}{x^2} x \to 3 x^2 + 3x - 18 \).

5. If \( \lim_{x \to 5} f(x) = 0 \) and \( \lim_{x \to 5} g(x) = 0 \), then \( \lim_{x \to 5} \frac{f(x)}{g(x)} \) does not exist.