

---

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 then the limit  $\lim_{x \rightarrow 6} p(x)$  is  $p(6)$
- 3. If  $\lim_{x \rightarrow 6} [f(x)g(x)]$  exists, then the limit is  $f(6)g(6)$
- 4.  $\lim_{x \rightarrow 3} \frac{x^2 + 2x - 15}{x^2 + 3x - 18} = \frac{\lim_{x \rightarrow 3} x^2 + 2x - 15}{\lim_{x \rightarrow 3} x^2 + 3x - 18}$
- 5. If  $\lim_{x \rightarrow 5} f(x) = 0$  and  $\lim_{x \rightarrow 5} g(x) = 0$ , then  $\lim_{x \rightarrow 5} [f(x)/g(x)]$  does not exist