Definition (Briggs)**. Limit Laws:** Assume $\lim_{x \to a} f(x)$ and $\lim_{x \to a} g(x)$ exist. The following properties hold, where c is a real number, and $n > 0$ is an integer.

1. **Sum:** $\lim_{x \to a} (f(x) + g(x)) = \lim_{x \to a} f(x) + \lim_{x \to a} g(x)$
2. **Difference:** $\lim_{x \to a} (f(x) - g(x)) = \lim_{x \to a} f(x) - \lim_{x \to a} g(x)$
3. **Constant multiple:** $\lim_{x \to a} (cf(x)) = c \lim_{x \to a} f(x)$
4. **Product:** $\lim_{x \to a} (f(x)g(x)) = \left(\lim_{x \to a} f(x)\right)\left(\lim_{x \to a} g(x)\right)$
5. **Quotient:** $\lim_{x \to a} \left(\frac{f(x)}{g(x)}\right) = \frac{\lim_{x \to a} f(x)}{\lim_{x \to a} g(x)}$, provided $\lim_{x \to a} g(x) \neq 0$
6. **Power:** $\lim_{x \to a} (f(x))^n = (\lim_{x \to a} f(x))^n$
7. **Root:** $\lim_{x \to a} (f(x))^{1/n} = (\lim_{x \to a} f(x))^{1/n}$