함수의 극한에 관한 기본 성질 (Basic Properties of the Limits of Functions) \lim

 \lim_x

 $\lim_{x\to}$

 $\lim_{x\to a}$

$$\lim_{x \to a} f(x) =$$

$$\lim_{x \to a} f(x) = \alpha,$$

$$\lim_{x \to a} f(x) = \alpha, \lim$$

$$\lim_{x \to a} f(x) = \alpha, \lim_{x \to a} f(x) = \alpha$$

$$\lim_{x \to a} f(x) = \alpha, \lim_{x \to a}$$

$$\lim_{x \to a} f(x) = \alpha, \lim_{x \to a}$$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) =$$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta$$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

• lim

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

 $\bullet \lim_{x}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

• $\lim_{x \to \infty}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

• $\lim_{x \to a}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

• $\lim_{x \to a} k$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

 $\bullet \lim_{x \to a} kf(x)$

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$$\bullet \lim_{x \to a} kf(x) =$$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

 $\bullet \lim_{x \to a} kf(x) = k$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

 $\bullet \lim_{x \to a} kf(x) = k\alpha$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

• $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
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$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\bullet \lim_{x}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to \infty}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a}$

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- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\bullet \lim_{x \to a} \{f(x)\}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x\to a} \{f(x) \pm a\}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\bullet \lim_{x \to a} \{ f(x) \pm g(x) \}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\bullet \lim_{x \to a} \{ f(x) \pm g(x) \} =$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\bullet \lim_{x \to a} \{ f(x) \pm g(x) \} = \alpha$



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- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm$

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- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$

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- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)

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- $\bullet \lim_{x}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to \infty}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
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- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{f(x)\}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{f(x)g(x)\} =$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- lim

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

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- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\bullet \lim_{x}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\lim_{x\to}$



$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\lim_{x \to a}$



$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

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- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\bullet \lim_{x \to a} \frac{f(x)}{}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\bullet \lim_{x \to a} \frac{f(x)}{g(x)}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\lim_{x \to a} \{f(x)g(x)\} = \alpha\beta$
- $\bullet \lim_{x \to a} \frac{f(x)}{g(x)} =$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x\to a} \{f(x)\pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\bullet \lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{a}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

- $\lim_{x \to a} kf(x) = k\alpha \ (k \text{ is a constant.})$
- $\lim_{x\to a} \{f(x)\pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\bullet \lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta}$

$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

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- $\lim_{x\to a} \{f(x)\pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$



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- $\lim_{x \to a} \{f(x) \pm g(x)\} = \alpha \pm \beta$ (Double signs in same order.)
- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- \bullet f(x)



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- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- \bullet f(x) <



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- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- f(x) < g(x)



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- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- $f(x) < g(x) \Rightarrow$



$$\lim_{x \to a} f(x) = \alpha, \ \lim_{x \to a} g(x) = \beta \ (\alpha, \beta \in \mathbb{R})$$

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- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- $f(x) < g(x) \Rightarrow \alpha$



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- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- $f(x) < g(x) \Rightarrow \alpha \le$



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- $\bullet \lim_{x \to a} \{ f(x)g(x) \} = \alpha \beta$
- $\lim_{x \to a} \frac{f(x)}{g(x)} = \frac{\alpha}{\beta} \ (\beta \neq 0)$
- $f(x) < g(x) \Rightarrow \alpha \le \beta$



Github:

https://min7014.github.io/math20200910003.html

Click or paste URL into the URL search bar, and you can see a picture moving.