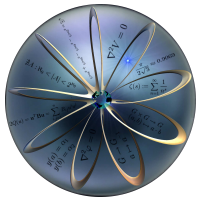

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infimum and supremum of sum and product

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Suppose that the real functions f and g are defined on an interval Δ. Then on this interval

- $\inf(f+g) \geqq \inf f + \inf g$
- $\sup(f+g) \leqq \sup f + \sup g$

If f and g are also nonnegative on Δ, we can write

- $\inf(fg) \geqq \inf f \cdot \inf g$
- $\sup(fg) \leqq \sup f \cdot \sup g$