

Example

Find the absolute minimum and the absolute maximum values of

$$f(x) = x^2 + 1 \quad \text{on the interval } [-1, 2].$$

Example

Find the absolute minimum and the absolute maximum values, if they exist, of

$$f(x) = x^2 + 1.$$

Example

Find the absolute minimum and the absolute maximum values of

$$f(x) = 3x^2 - 12x + 5 \quad \text{on the interval } [0, 3].$$

Example

Find the absolute maximum and minimum values of the function

$$f(x) = x^3 - 3x^2 + 1 \quad \text{when } -\frac{1}{2} \leq x \leq 4.$$

Example

Find the absolute maximum and minimum values of the function

$$f(x) = \frac{x}{x^2 + 1} \quad \text{when } 0 \leq x \leq 2.$$