

**1.** Find the absolute maximum and absolute minimum (if any) of the function

$$f(x) = x^5 - 5x^4 + 1 \text{ on the interval } 0 \leq x \leq 5.$$

2. Find the absolute maximum and absolute minimum (if any) of the function  $f(x) = x + \frac{1}{x-1}$  on the interval  $x > 1$ .

Q: What comes once in a minute, twice in a moment, but never in a thousand years?