

# The T<sub>E</sub>X Testbook

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Let  $\epsilon > 0$  be given. Since  $f$  is monotonically increasing, for each  $i = 1, 2, \dots, n$ , there exists a point  $x_i \in [x_{i-1}, x_i]$  such that  $f(x_i) - f(x_{i-1}) \geq \frac{\epsilon}{n}$ . Let  $P$  be the partition of  $[0, 1]$  given by  $P = \{x_0, x_1, \dots, x_n\}$ , where  $x_0 = 0$  and  $x_n = 1$ . Then,  $U(f, P) = \sum_{i=1}^n (f(x_i) - f(x_{i-1})) \Delta x_i$   
 $\geq \sum_{i=1}^n \frac{\epsilon}{n} \Delta x_i$   
 $= \frac{\epsilon}{n} \sum$

## 1 first examples

Hello world. "Paul Erdős"  
"TeX"

## 2 dummy text

this some dummy text

### 2.1 example nr.1

Lorem ipsum dolor sit amet consectetur adipisicing elit. Culpa non fugiat vitae incidunt minima cum veniam recusandae omnis explicabo rem? Asperiores sit maiores, dignissimos eligendi voluptatibus veniam fugit perferendis culpa.

### 2.2 example nr.2

Maxime incidunt nemo corrupti itaque cupiditate. Blanditiis illum voluptate fugiat quia nam voluptates provident consectetur, illo facilis obcaecati modi deserunt rem ipsum nisi, cupiditate iste quas itaque esse magni veritatis.

## 3 last section for now

$$a^2 + b^2 = c^2$$

this is in the center

Kautchebacuh: "witz, hahaha"

- This is the first item  $test^2 + r^3$
- This is the second item
- This is the last itme

$$x \in R \text{ is dumb} \tag{1}$$