

$$\frac{9}{4}$$

$$\frac{9}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$9$$

1, 7 | 7 | 7 | 7 | ... 1. 0

1, 7 |

3
—
7

30

20

— 60

— 40

— 5.

7

0,4285714

50

7

10

714

30

20

P

17

$$1, \overline{7373} \dots = 1, \overline{73}$$

$$= 1 + \underbrace{0, \overline{73}}_x = 1 + \frac{\overline{73}}{99} = \frac{172}{99}$$

$$100x = \overline{73}, \overline{73}$$

$$100x - x = \overline{73}$$

$$99x = \overline{73} \quad x = \frac{\overline{73}}{99}$$

~~0~~, 1 2 4 7 9 47 9 ... \dots

= 0, 1 2 479

= 1 · (1 2, 479)

10000

= $\frac{12}{10^2} + \frac{1}{10^2} (0, \overline{479})$

$$\sqrt{2} = \frac{p}{q}$$

(p, q primos
antes)

$$2 = \frac{p^2}{q^2}$$

$$\text{m.d.c.}(p, q) = 1$$

$$2q^2 = p^2 \rightarrow$$

per

$$p = 2q^2$$

$$2q^2 = p^2 = (2p')^2 = 4(p')^2$$

$$q^2 = 2(p')^2$$

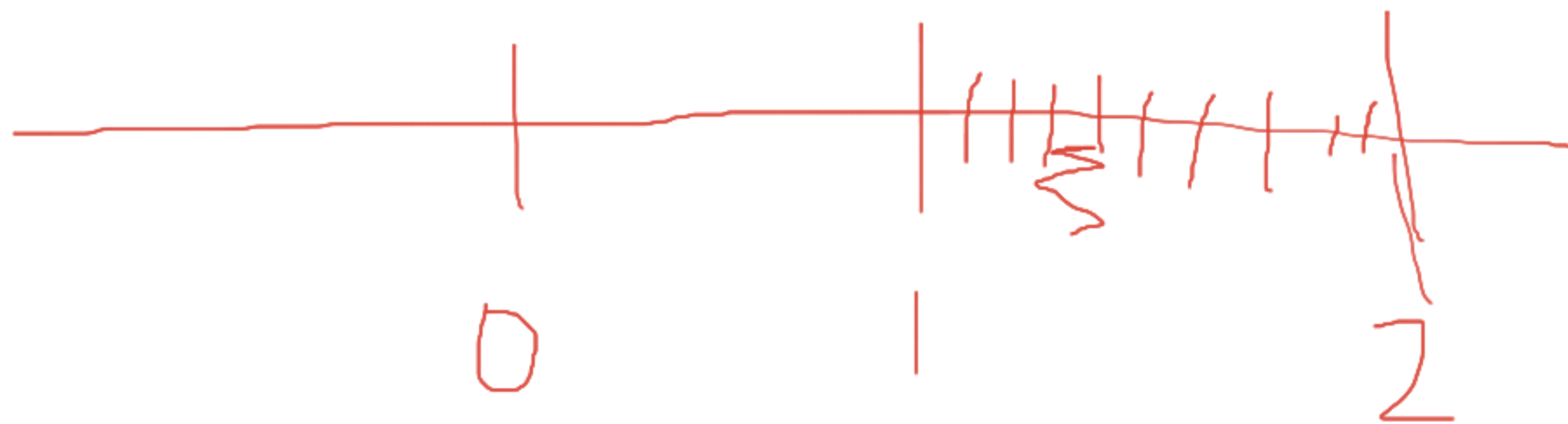
$$\exists q' \in \mathbb{N}$$

$$q = 2q'$$

$$2 \mid p$$

$$2 \mid q$$

$$\therefore \text{mdc}(p, q) \neq 1$$



$$1 < 2 < 4 \Rightarrow 1 < \sqrt{2} < 2$$

$$\begin{array}{l} (1, 1)^2 \\ (1, 2)^2 \end{array} \quad (1, 4)^2 < 2 < (1, 5)^2 \Rightarrow 1,4 < \sqrt{2} < 1,5$$

$$(1, 40)^2$$

$$(1, 41)^2 = 1, 9981$$

$$(1, 42)^2 = 2, 0164$$

$$(1, 41)^2 < 2 < (1, 42)^2 \Rightarrow$$

$$1, 41 < \sqrt{2} < 1, 42$$

$$(1, 415)^2 = 2,002,225$$

$$(1, 414)^2 = 1,999,396$$

$$\Rightarrow 1,414 < \sqrt{2} < 1,415$$

\mathbb{R} proprietas deinde No

interuolun anca de lantg

$$a_1 \leq a_2 \leq \dots \leq b_2 \leq b_1$$

$$(b_n - a_n) \rightarrow 0$$

Entän $\exists! C \in \mathbb{R}$

$$a_n \leq C \leq b_n \\ \forall n \in \mathbb{N}$$

\mathbb{R} , $\underbrace{a + c}_{\alpha \beta} < b + c$ $\alpha > 0$

$a < b$

$a + c < b + c$

\mathbb{N} , $n + (m + 1) = (n + m) + 1$

$m + (n + 1) = (m + n) + 1$

m

n

m

m

$$m < n \Rightarrow \exists ! k$$

$$m + k = n$$



$\mathbb{N} \times \mathbb{N}$

-7

$(0, 7) \rightsquigarrow 0 - 7$

$(1, 8) \rightsquigarrow 1 - 8$

$(2, 9)$

$$(3, 8) + (4, 5)$$

$$= (3 - 8) + (4 - 5)$$

$$= 3 + 4 - (8 + 5)$$

$$\rightarrow (3 + 4, 8 + 5) = (7, 13)$$