

1. Kokoraisiment

luonnolliset luvut $\mathbb{N} = \{0, 1, 2, 3, \dots\}$

En conséquence $\mathbb{Z} = \{ \dots, -2, -1, 0, 1, 2, \dots \}$

Exm. $21 \in \mathbb{N}$, $-15 \notin \mathbb{N}$, $-15 \in \mathbb{Z}$
 $\uparrow$ $\uparrow$
 1. Zahl jenseits 0 2. Zahl jenseits 0

Ex 11. $2 \cdot (-5) \cdot (-7) > 0$ $\uparrow$ surcambi' Surin

$(-3) \cdot (-8) \cdot (-11) < 0$ $\uparrow$ $\text{pi\u00e9cambi' Surin}$

Yleisesti Tulon merkittävästi

10. tulossa on pöyhäinen määre negatiivista lausua $\Rightarrow$ tulo on positiivinen

2° -11- penton — 11 — $\sigma \Rightarrow$ -11- negativer

zahlen	gegenteil	
7	-7	$(7 + (-7) = 0)$
-12	12	$(-12 + 12 = 0)$
a	-a	$(a + (-a) = 0)$

$$|-3| = 3, \quad |3| = 3, \quad \left| -\frac{3}{5} \right| = \frac{3}{5}$$

Gleisesh.

$$|a| = \begin{cases} a, & a \geq 0 \\ -a, & a < 0 \end{cases} \quad \text{ITSELSARVO}$$

ITSELSARVO

1.9 a) $16 + 857 + 84 = (16 + 84) + 857 = 100 + 857 = 957$

b) $5.92.20 = (5.20) \cdot 92 = 100 \cdot 92 = 9200$

c) $75 \cdot 102 = 75 \cdot (100 + 2) = 75 \cdot 100 + 75 \cdot 2 = 7500 + 150 = 7650$

1,11 7, -15

$$a) -(7 + (-15)) = -(-8) = 8$$

$$b) \quad -7 + 15 = 8$$

$$c) -|7 + (-15)| = -|-8| = -(8) = -8$$

1.18, 19, 22, 23

1.18 a) $-4 \cdot (-7) = 4 \cdot 7 = 28$

$$b) 24 : (-4) = \frac{24}{-4} = -\frac{24}{4} = -6$$