

$$A \cap B$$



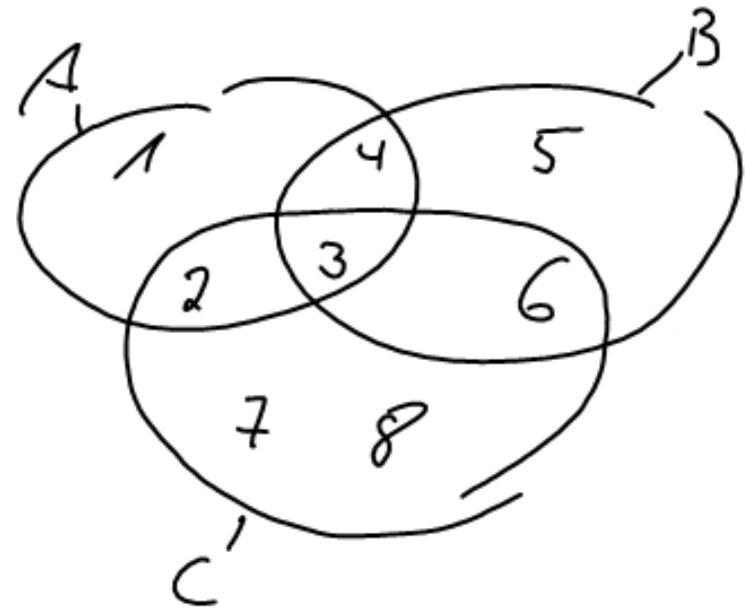
$$A \cup B$$



$$A \setminus B$$



$$B \setminus A$$



$$A \cap B \rightarrow A \cap B = \{3, 4\}$$

$$A \setminus B \rightarrow A \setminus \{3, 4\} = \{1, 2\}$$

$$C \setminus (A \cup B)$$

$$S. 32 \quad 1) \quad A = \{-6; \underline{-4}; -2; \underline{0}; 2; 6; 14; \underline{16}; 18; \underline{20}; 22; 26\}$$

$$B = \{-10; -8; \underline{-4}; \underline{0}; 4; 8; 10; 12; \underline{16}; \underline{20}; 24; 28; 30; 32\}$$

$$a) \quad A \cap B = \{-4; 0; 16; 20\}$$

$$= \{x \in [-4; 20]_{\mathbb{Z}} \setminus \{4; 8; 12\} \mid x \bmod 4 = 0\}$$

$$b) \quad A \cup B = \{-10; -8; -6; \dots; 30; 32\}$$

$$A \cup B = \{x \in [-10; 32]_{\mathbb{Z}} \mid x \bmod 2 = 0\}$$

$$c) \quad \underline{A \setminus B} = \{-6; -2; 2; 6; 14; 18; 22; 26\}$$

$$= \{x \in [-6; 26] \setminus \{-4; 0; 4; 8; 10; 12; 16; 20; 24\} \mid \begin{matrix} x \bmod 2 \\ = 0 \end{matrix}\}$$

$$\quad \quad \quad \mid x \bmod 4 \neq 0 \vee x \bmod 10 \neq 0\}$$

$$d) \quad \underline{B \setminus A} = \{-10; -8; 4; 8; 10; 12; 24; 28; 30; 32\}$$

$$\overbrace{A \cap B}^1 \cup C^2$$

$$\overline{50 - 8} = \overline{42} \quad \leftarrow$$

$$\overline{50} + \overline{8} = 40 + 2 = 42$$

$$3 \cdot x + 5 = 14 \quad | -5$$

$$3 \cdot x + (5 - 5) = 14 - 5$$

$$3 \cdot x + 0 = 9 \quad | \cdot \frac{1}{3}$$

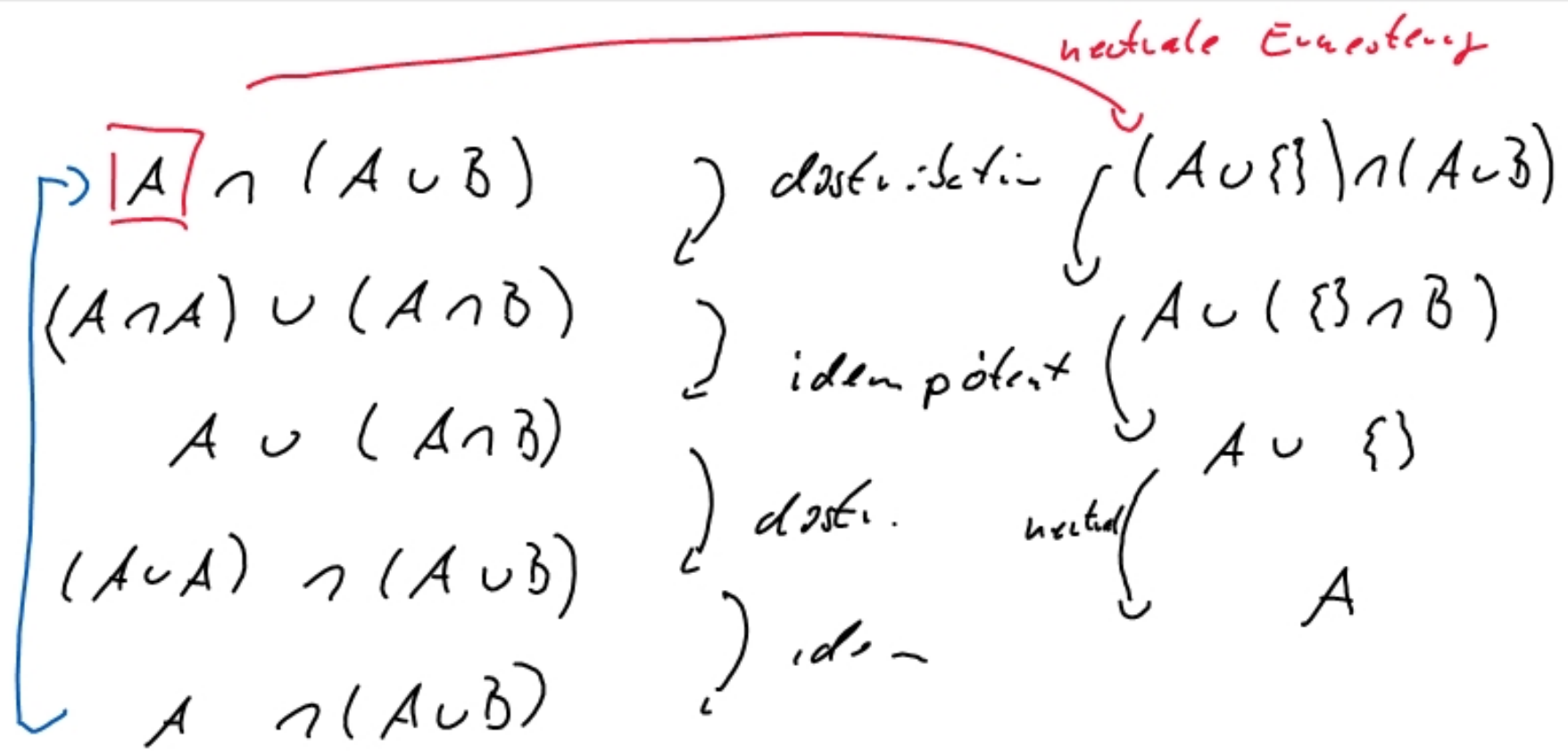
$$3 \cdot \frac{1}{3} \cdot x + 0 = 9 \cdot \frac{1}{3}$$

$$1 \cdot x + 0 = 3$$

$$x = 3$$

\mathcal{O} neutral zu +

1 neutral zu \cdot



$$\overline{\overline{A \cup B} \cap \overline{A \cup \bar{B}}}$$

de Morgan

$$\overline{\overline{A \cup B} \cap \overline{A \cup \bar{B}}}$$

doppelle Negation

$$(A \cup B) \cap (A \cup \bar{B})$$

distributiv

$$A \cup (B \cap \bar{B})$$

Komplement

$$A \cup \{\}$$

neutral $\{\{\}\} = A \quad B = \{0\}$

$$A$$

$$A \times B = \{(\{\}; 0)\}$$

$$0,25 = \frac{25}{99}$$