

NR. 25 A-LF

$$\frac{\sqrt{7+2\sqrt{10}}}{m} - \frac{\sqrt{5-2\sqrt{6}}}{n} = A \quad \left\{ (a \pm b) = \sqrt{a^2 \pm 2ab + b^2} \right.$$

$$m = \sqrt{7+2\sqrt{10}} = \sqrt{5+2\sqrt{5 \cdot 2}} =$$

$$= \sqrt{(\sqrt{5})^2 + 2\sqrt{5} \cdot \sqrt{2} + (\sqrt{2})^2} = \sqrt{(\sqrt{5} + \sqrt{2})^2} = |\sqrt{5} + \sqrt{2}|$$

$$\sqrt{5} + \sqrt{2} > 0 \Rightarrow m = \sqrt{5} + \sqrt{2}$$

$$n = \sqrt{5-2\sqrt{6}} = \sqrt{5-2\sqrt{3 \cdot 2}} = \sqrt{(\sqrt{3})^2 - 2\sqrt{3}\sqrt{2} + (\sqrt{2})^2} =$$

$$= \sqrt{(\sqrt{3}-\sqrt{2})^2} = |\sqrt{3} - \sqrt{2}|$$

$$3 > 2 \Rightarrow \sqrt{3} > \sqrt{2} \Rightarrow \sqrt{3} - \sqrt{2} > 0 \Rightarrow n = \sqrt{3} - \sqrt{2}$$

$$A = \sqrt{5} + \sqrt{2} - (\sqrt{3} - \sqrt{2}) = \sqrt{5} + \sqrt{2} - \sqrt{3} + \sqrt{2}$$

$$A = \sqrt{5} - \sqrt{3} + 2\sqrt{2} \quad \left\{ \begin{array}{l} \sqrt{A \pm \sqrt{B}} = \sqrt{\frac{A + \sqrt{A^2 - B}}{2}} \pm \sqrt{\frac{A - \sqrt{A^2 - B}}{2}} \\ B \geq 0, A \geq B \end{array} \right.$$

$$\sqrt{11+6\sqrt{2}} = \sqrt{11+\sqrt{72}} = \sqrt{\frac{11+\sqrt{121-72}}{2}} + \sqrt{\frac{11-\sqrt{121-72}}{2}} =$$

$$= \sqrt{\frac{11+\sqrt{49}}{2}} + \sqrt{\frac{11-\sqrt{49}}{2}} = \sqrt{\frac{11+7}{2}} + \sqrt{\frac{11-7}{2}} = \sqrt{9} + \sqrt{2} = 3 + \sqrt{2}$$

$$\begin{array}{l} A = \left\{ x \mid x = 2k+1, k \in \mathbb{Z} \right\} \\ B = \left\{ x \mid x = 201 - 2p, p \in \mathbb{Z} \right\} \end{array} \Rightarrow A \cap B = ?$$

$$(+) k \in \mathbb{Z} \Rightarrow 2k+1 = \text{m. unpair}$$

$$\text{m. unpair} - \text{m. pair} = \text{unpair}$$

$$(+) p \in \mathbb{Z} \Rightarrow 2p = \text{m. pair} \quad \left. \begin{array}{l} \\ 201 - 2p = \text{m. unpair} \\ 201 = \text{m. pair} \end{array} \right\} \Rightarrow 201 - 2p = \text{m. unpair}$$

$$\Rightarrow A = B = \left\{ x \mid x = 2k+1, k \in \mathbb{Z} \right\} \Rightarrow$$

$$\underline{A \cap B = A}$$

$$A = \left\{ m \in \mathbb{N} \mid \frac{13}{2m-1} \in \mathbb{N} \right\}$$

$$B = \left\{ m \in \mathbb{N} \mid \frac{5m+1}{5m-1} \in \mathbb{Z} \right\}$$

$$C = \left\{ m \in \mathbb{Z} \mid \frac{2m+3}{3m-1} \in \mathbb{Z} \right\}$$

$$\begin{aligned} \text{Termü - m 2000: } & \quad \neg 8 / \text{Pg 12} \\ E \text{ o } A \text{ o } C, \text{ m def } / \text{Pg 33} & \end{aligned}$$