

Aufgabe 1964/65 1:

2 P

Berechne logarithmisch:

$$\sqrt[3]{\frac{3,892^2 - 1,12^3}{0,823 \cdot 20,78}}$$

Lösung 1964/65 1:

Logarithmische Berechnung:

$$B = \sqrt[3]{\frac{3,892^2 - 1,12^3}{0,823 \cdot 20,78}}$$

$$B = \left(\frac{3,892^2 - 1,12^3}{0,823 \cdot 20,78} \right)^{\frac{1}{3}} \quad \sqrt[n]{a} = a^{\frac{1}{n}}$$

$$B = \left(\frac{15,147664 - 1,4238281}{17,10194} \right)^{\frac{1}{3}}$$

$$B = \left(\frac{13,723836}{17,10194} \right)^{\frac{1}{3}}$$

$$B = 0,8024724^{\frac{1}{3}} \quad | \log$$

$$\log B = \log 0,8024724^{\frac{1}{3}}$$

$$\log B = \frac{1}{3} \cdot \log 0,8024724 \quad \log x^y = y \cdot \log x$$

$$\log B = \frac{1}{3} \cdot (-0,09698)$$

$$\log B = -0,031866$$

$$\underline{\underline{B = 0,9292731}}$$