

$$a = 2002$$

$$b = 9$$

$$c = 12$$

$$1. \frac{9}{b \cdot c}$$

$$2. \sqrt{b \cdot c}$$

$$2. \sqrt{b}$$

$$= 3 -$$

$$1. \frac{2002}{108} = \frac{1001}{54} = 18 + \frac{29}{54} = 18 + \frac{1}{\frac{54}{29}} = 3 +$$

$$= 18 + \frac{1}{1 + \frac{25}{29}} = 18 + \frac{1}{1 + \frac{1}{\frac{29}{25}}} =$$

$$\sqrt{12}$$

$$= 18 + \frac{1}{1 + \frac{1}{1 + \frac{4}{25}}} = 18 + \frac{1}{1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{6 + \frac{3}{4}}}}} =$$

$$z 1$$

$$= [18, 1, 1, 6, 4]$$

$$2002 = 108 \cdot 18 + 58$$

$$108 = 58 \cdot 1 + 50$$

$$58 = 50 \cdot 1 + 8$$

$$50 = 8 \cdot 6 + 2$$

$$8 = 2 \cdot 4$$

Ergebnis: $[18, 1, 1, 6, 4]$

$$2. \sqrt{12 \cdot 9 + 1} = \sqrt{109} = 3 + \sqrt{109} - 3 =$$

$$= 3 + \frac{1}{\frac{1}{\sqrt{109} - 3}} = 3 + \frac{1}{\frac{\sqrt{109} + 3}{100}} = 3 + \frac{1}{1 + \frac{\sqrt{109} - 97}{100}} =$$

$$= 3 + \frac{1}{1 + \frac{1}{\frac{100}{\sqrt{109} - 97}}} = 3 + \frac{1}{1 + \frac{1}{1}}$$

$$\sqrt{12 \cdot 9 + 1} = \sqrt{109} = 10 + \sqrt{109' - 10} = 10 + \frac{1}{\frac{1}{\sqrt{109'} - 10}} =$$

$$= 10 + \frac{1}{\frac{\sqrt{109} + 10}{9}} = 10 + \frac{1}{2 + \frac{1}{\frac{\sqrt{109} + 8}{9}}} =$$

$$= 10 + \frac{1}{2 + \frac{1}{\frac{9}{\sqrt{109} + 8}}} = 10 + \frac{1}{2 + \frac{1}{2 + \frac{1}{\frac{9(\sqrt{109} + 8)}{45}}}} =$$

$$= 10 + \frac{1}{2 + \frac{1}{\frac{5(\sqrt{109} + 8)}{5}}} = 10 + \frac{1}{2 + \frac{1}{2 + \frac{1}{3 + \frac{\sqrt{109} - 7}{5}}}} =$$

$$= 10 + \frac{1}{2 + \frac{1}{2 + \frac{1}{3 + \frac{1}{\frac{5}{\sqrt{109} - 7}}}}} = 10 + \frac{1}{2 + \frac{1}{2 + \frac{1}{3 + \frac{1}{2 + \frac{1}{\frac{\sqrt{109} + 7}{12}}}}}} =$$

$$= 10 + \frac{1}{2 + \frac{1}{3 + \frac{1}{1 + \frac{\sqrt{109}-5}{12}}}} = 1 +$$

$$= 10 + \frac{1}{2 + \frac{1}{3 + \frac{1}{1 + \frac{1}{\frac{12}{\sqrt{109}-5}}}}} = 1 +$$

$$= 10 + \frac{1}{2 + \frac{1}{3 + \frac{1}{1 + \frac{1}{\frac{3\sqrt{109}+5}{7}}}}} = [10, 2, 3, 1, \dots] = 1 +$$

$$2 + \frac{\sqrt{109}-9}{7} = 2 + \frac{1}{4(\sqrt{109}+9)} =$$

$$= 2 + \frac{1}{4 + \frac{\sqrt{109}-17}{4}} = 2 + \frac{1}{4 + \frac{1}{\frac{4(\sqrt{109}+17)}{+160}}} =$$

$$= 2 + \frac{1}{4 + \frac{1}{1 + \frac{\sqrt{109}-8}{15}}} = [10, 2, 3, 1, 2, 4, 1, \dots]$$

$$1 + \frac{1}{15(\sqrt{109}+8)} = 1 + \frac{1}{15(\sqrt{109}+8)} =$$

$$= 1 + \frac{1}{6 + \frac{\sqrt{109}-10}{3}} = 1 + \frac{1}{6 + \frac{1}{\frac{3(\sqrt{109}+10)}{9}}} =$$

$$= 1 + \frac{1}{6 + \frac{1}{\frac{\sqrt{109} - 8}{3}}} = 1 + \frac{1}{6 + \frac{1}{6 + \frac{\sqrt{109} + 8}{15}}} =$$

$$= 1 + \frac{\sqrt{109} - 7}{15} = [10, 2, 3, 1, 2, 4, 1, 6, 6, 1, \dots] =$$

2. ~~$\sqrt{109+1} = \sqrt{109} + 10 - 10 = 10 + \frac{1}{\sqrt{109}+10}$~~ =
 ~~$= 10 +$~~