

$$5) x = \frac{2}{5} = 0,4$$

$$y = \frac{3}{7}$$

$$x - y = \frac{14 - 15}{35} = -\frac{1}{35} \approx -0,1101_2 \times 2^{-5}$$

Rundung:  $x = \cancel{0,1100}_2 \times 2$

$$x = (1,1001)_2 \times 2^{-2} \approx 1,1001 \times 2^{-2}$$

$$y = (1,10110)_2 \times 2^{-2} \approx 1,1011 \times 2^{-2}$$

$$x - y = 1,1001 \times 2^{-2} - 1,1011 \times 2^{-2} =$$

$$= 2^{-2} \times (1,1001 - 1,1011) = 2^{-2} \times 0,0001 =$$

$$= 1,0000_2 \times 2^{-7} = 0,0078125_{10} = \frac{1}{128}_{10}$$

Relativer Fehler:  $\left| \frac{x-f}{x} \right| =$

$$= \left| \left( -\frac{1}{35} \pm \frac{1}{128} \right) / \frac{1}{35} \right| = \left| -\frac{93}{1480} / \frac{1}{35} \right| =$$

$$= \frac{93}{128} \approx 0,7267; \text{ Relativ Fehler: } \sim 72,67\%$$