

Verbindung der Grundrechnungsarten

$$\begin{aligned} \frac{3}{5} \cdot 2\frac{1}{2} + 1\frac{1}{3} : \frac{4}{5} &= \\ &= \frac{3 \cdot 5}{5 \cdot 2} + \frac{4 \cdot 5}{3 \cdot 4} = \\ &= 1\frac{1}{2} + 1\frac{2}{3} = \\ &= 2\frac{3+4}{6} = \\ &= 3\frac{1}{6} \end{aligned}$$

$$\begin{aligned} \left(2\frac{1}{4} - 1\frac{1}{3}\right) : \frac{1}{4} &= \\ &= 1\frac{3-4}{12} : \frac{1}{4} = \\ &= \frac{15-4}{12} : \frac{1}{4} = \\ &= \frac{11 \cdot 4}{12 \cdot 1} = \\ &= 3\frac{2}{3} \end{aligned}$$

Punktrechnung vor Strichrechnung

$$\begin{aligned} 5\frac{3}{5} - \left(4\frac{1}{5} - 2\frac{7}{10}\right) : 1\frac{1}{4} &= \\ &= 5\frac{3}{5} - 2\frac{2-7}{10} : 1\frac{1}{4} = \\ &= 5\frac{3}{5} - 1\frac{12-7}{10} : 1\frac{1}{4} = \\ &= 5\frac{3}{5} - \frac{15}{10} : 1\frac{1}{4} = \\ &= 5\frac{3}{5} - \frac{15 \cdot 4}{10 \cdot 5} = \\ &= 5\frac{3}{5} - \frac{3 \cdot 2}{5 \cdot 1} = \\ &= 4\frac{2}{5} \end{aligned}$$

Ausdrücke in der Klammer müssen zuerst berechnet werden.

$$\begin{aligned} 3 \cdot \left(14\frac{1}{3} - 2\frac{1}{2} \cdot 3\frac{1}{5}\right) &= \\ &= 3 \cdot \left(14\frac{1}{3} - \frac{5 \cdot 16}{2 \cdot 5}\right) = \\ &= 3 \cdot \left(14\frac{1}{3} - 8\right) = \\ &= 3 \cdot 6\frac{1}{3} = \\ &= 19 \end{aligned}$$

$$\begin{aligned} 7\frac{1}{2} \cdot 1\frac{2}{5} : \left(3\frac{1}{3} \cdot 1\frac{4}{5}\right) &= & 6\frac{2}{5} \cdot \left(4\frac{1}{4} - 3\frac{1}{2}\right) &= & \left(6\frac{1}{5} + 4\frac{3}{10}\right) : 3\frac{3}{4} &= \\ &= 7\frac{1}{2} \cdot 1\frac{2}{5} : \frac{10 \cdot 9}{3 \cdot 5} &= 6\frac{2}{5} \cdot \frac{3}{4} &= &= 10\frac{5}{10} : 3\frac{3}{4} &= \\ &= 7\frac{1}{2} \cdot 1\frac{2}{5} : \frac{2 \cdot 3}{1 \cdot 1} &= \frac{32 \cdot 3}{5 \cdot 4} = \frac{8 \cdot 3}{5 \cdot 1} &= &= 10\frac{1}{2} : 3\frac{3}{4} &= \\ &= \frac{15 \cdot 7 \cdot 1}{2 \cdot 5 \cdot 6} = \frac{21}{12} = 1\frac{3}{4} &= 4\frac{3}{5} &= &= \frac{21 \cdot 4}{2 \cdot 15} = \frac{7 \cdot 2}{1 \cdot 5} = 2\frac{4}{5} \end{aligned}$$

Rechne in Bruchschreibweise!

$$\begin{aligned} 2,6 + 1,6 \cdot 0,4 &= \\ 2\frac{6}{10} + 1\frac{6}{9} \cdot \frac{4}{10} &= \\ 2\frac{3}{5} + \frac{15 \cdot 4}{9 \cdot 10} &= \\ 2\frac{3}{5} + \frac{1 \cdot 2}{3 \cdot 1} &= \\ 2\frac{9+10}{15} &= 3\frac{4}{15} \end{aligned}$$

$$\begin{aligned} 7\frac{3}{4} + \frac{4}{9} \cdot 1,5 - 2,6 : 0,4 &= \\ 7\frac{3}{4} + \frac{4 \cdot 3}{9 \cdot 2} - \frac{24 \cdot 9}{9 \cdot 4} &= \\ 7\frac{3}{4} + \frac{2}{3} - 6 &= \\ 1\frac{9+8}{12} &= 2\frac{5}{12} \end{aligned}$$