

Bruchrechnen: Addition und Subtraktion 1

1) Addiere und kürze das Ergebnis so weit wie möglich:

a) $\frac{2}{3} + \frac{1}{3} =$ b) $\frac{2}{5} + \frac{1}{5} =$ c) $\frac{5}{8} + \frac{3}{8} =$ d) $\frac{2}{3} + \frac{4}{9} =$
e) $\frac{2}{5} + \frac{3}{7} =$ f) $\frac{7}{10} + \frac{3}{8} =$ g) $\frac{1}{4} + \frac{2}{5} =$ h) $\frac{6}{7} + \frac{3}{14} =$
i) $2\frac{3}{5} + \frac{3}{4} =$ j) $1\frac{5}{6} + 5\frac{4}{9} =$ k) $\frac{5}{12} + 10\frac{1}{4} =$ l) $2\frac{4}{7} + 5\frac{2}{3} =$

2) Subtrahiere und kürze soweit wie möglich:

a) $\frac{6}{7} - \frac{3}{7} =$ b) $\frac{3}{4} - \frac{1}{4} =$ c) $\frac{7}{8} - \frac{5}{6} =$ d) $\frac{5}{7} - \frac{10}{14} =$
e) $\frac{5}{7} - \frac{1}{2} =$ f) $\frac{3}{4} - \frac{4}{12} =$ g) $\frac{7}{10} - \frac{3}{8} =$ h) $\frac{2}{3} - \frac{5}{9} =$
i) $3\frac{1}{2} - \frac{3}{8} =$ j) $7\frac{3}{4} - \frac{1}{2} =$ k) $4\frac{5}{9} - 2\frac{4}{7} =$ l) $12\frac{2}{3} - 7\frac{5}{6} =$

3) Berechne und kürze soweit wie möglich:

a) $3\frac{3}{5} - 1\frac{6}{11} =$ b) $\frac{6}{7} - \frac{3}{4} =$ c) $2\frac{5}{12} + 4\frac{2}{3} =$ d) $8\frac{9}{10} + 4\frac{1}{3} =$
e) $9\frac{2}{9} - 5\frac{1}{6} =$ f) $7\frac{4}{15} - 2\frac{7}{9} =$ g) $6\frac{3}{35} + 1\frac{6}{7} =$ h) $13\frac{2}{14} - 6\frac{8}{21} =$
i) $2\frac{1}{2} + 1\frac{4}{5} =$ j) $\frac{10}{11} + 2\frac{3}{4} =$ k) $6\frac{3}{8} - 3\frac{4}{7} =$ l) $20\frac{11}{12} - 4\frac{5}{8} =$

Lösungen:

1) Addiere und kürze das Ergebnis so weit wie möglich:

$$\text{a) } \frac{2}{3} + \frac{1}{3} = \frac{3}{3} = 1$$

$$\text{b) } \frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

$$\text{c) } \frac{5}{8} + \frac{3}{8} = \frac{8}{8} = 1$$

$$\text{d) } \frac{2}{3} + \frac{4}{9} = \frac{6}{9} + \frac{4}{9} = \frac{10}{9} = 1\frac{1}{9}$$

$$\text{e) } \frac{2}{5} + \frac{3}{7} = \frac{14}{35} + \frac{15}{35} = \frac{29}{35}$$

$$\text{f) } \frac{7}{10} + \frac{3}{8} = \frac{28}{40} + \frac{15}{40} = \frac{43}{40} = 1\frac{3}{40}$$

$$\text{g) } \frac{1}{4} + \frac{2}{5} = \frac{5}{20} + \frac{8}{20} = \frac{13}{20}$$

$$\text{h) } \frac{6}{7} + \frac{3}{14} = \frac{12}{14} + \frac{3}{14} = \frac{15}{14} = 1\frac{1}{14}$$

$$\text{i) } 2\frac{3}{5} + \frac{3}{4} = 2\frac{12}{20} + \frac{15}{20} = 2\frac{27}{20} = 3\frac{7}{20}$$

$$\text{j) } 1\frac{5}{6} + 5\frac{4}{9} = 1\frac{15}{18} + 5\frac{8}{18} = 6\frac{23}{18} = 7\frac{5}{18}$$

$$\text{k) } \frac{5}{12} + 10\frac{1}{4} = \frac{5}{12} + 10\frac{3}{12} = 10\frac{8}{12} = 10\frac{2}{3}$$

$$\text{l) } 2\frac{4}{7} + 5\frac{2}{3} = 2\frac{12}{21} + 5\frac{14}{21} = 7\frac{26}{21} = 8\frac{5}{21}$$

2) Subtrahiere und kürze soweit wie möglich:

$$\text{a) } \frac{6}{7} - \frac{3}{7} = \frac{3}{7}$$

$$\text{b) } \frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$$

$$\text{c) } \frac{7}{8} - \frac{5}{6} = \frac{21}{24} - \frac{20}{24} = \frac{1}{24}$$

$$\text{d) } \frac{5}{7} - \frac{10}{14} = \frac{10}{14} - \frac{10}{14} = 0$$

$$\text{e) } \frac{5}{7} - \frac{1}{2} = \frac{10}{14} - \frac{7}{14} = \frac{3}{14}$$

$$\text{f) } \frac{3}{4} - \frac{4}{12} = \frac{9}{12} - \frac{4}{12} = \frac{5}{12}$$

$$\text{g) } \frac{7}{10} - \frac{3}{8} = \frac{28}{40} - \frac{15}{40} = \frac{13}{40}$$

$$\text{h) } \frac{2}{3} - \frac{5}{9} = \frac{6}{9} - \frac{5}{9} = \frac{1}{9}$$

$$\text{i) } 3\frac{1}{2} - \frac{3}{8} = 3\frac{4}{8} - \frac{3}{8} = 3\frac{1}{8}$$

$$\text{j) } 7\frac{3}{4} - \frac{1}{2} = 7\frac{3}{4} - \frac{2}{4} = 7\frac{1}{4}$$

$$\text{k) } 4\frac{5}{9} - 2\frac{4}{7} = 4\frac{35}{63} - 2\frac{36}{63} = 3\frac{98}{63} - 2\frac{36}{63} = 1\frac{62}{63}$$

$$\text{l) } 12\frac{2}{3} - 7\frac{5}{6} = 12\frac{4}{6} - 7\frac{5}{6} = 11\frac{10}{6} - 7\frac{5}{6} = 4\frac{5}{6}$$

3) Berechne und kürze soweit wie möglich:

$$\text{a) } 3\frac{3}{5} - 1\frac{6}{11} = 3\frac{33}{55} - 1\frac{30}{55} = 2\frac{3}{55} \qquad \text{b) } \frac{6}{7} - \frac{3}{4} = \frac{24}{28} - \frac{21}{28} = \frac{3}{28}$$

$$\text{c) } 2\frac{5}{12} + 4\frac{2}{3} = 2\frac{5}{12} + 4\frac{8}{12} = 6\frac{13}{12} = 7\frac{1}{12}$$

$$\text{d) } 8\frac{9}{10} + 4\frac{1}{3} = 8\frac{27}{30} + 4\frac{10}{30} = 12\frac{37}{30} = 13\frac{7}{30}$$

$$\text{e) } 9\frac{2}{9} - 5\frac{1}{6} = 9\frac{4}{18} - 5\frac{3}{18} = 4\frac{1}{18}$$

$$\text{f) } 7\frac{4}{15} - 2\frac{7}{9} = 7\frac{12}{45} - 2\frac{35}{45} = 6\frac{57}{45} - 2\frac{35}{45} = 4\frac{22}{45}$$

$$\text{g) } 6\frac{3}{35} + 1\frac{6}{7} = 6\frac{3}{35} + 1\frac{30}{35} = 7\frac{33}{35}$$

$$\text{h) } 13\frac{2}{14} - 6\frac{8}{21} = 13\frac{6}{42} - 6\frac{16}{42} = 12\frac{48}{42} - 6\frac{16}{42} = 6\frac{32}{42} = 6\frac{16}{21}$$

$$\text{i) } 2\frac{1}{2} + 1\frac{4}{5} = 2\frac{5}{10} + 1\frac{8}{10} = 3\frac{13}{10} = 4\frac{3}{10}$$

$$\text{j) } \frac{10}{11} + 2\frac{3}{4} = \frac{40}{44} + 2\frac{33}{44} = 2\frac{73}{44} = 3\frac{29}{44}$$

$$\text{k) } 6\frac{3}{8} - 3\frac{4}{7} = 6\frac{21}{56} - 3\frac{32}{56} = 5\frac{77}{56} - 3\frac{32}{56} = 2\frac{45}{56}$$

$$\text{l) } 20\frac{11}{12} - 4\frac{5}{8} = 20\frac{22}{24} - 4\frac{15}{24} = 16\frac{7}{24}$$