

Übung Addition von Bruchzahlen, Hauptnenner, Kürzen, Darstellung als Dezimalzahl

$$\begin{array}{rcl}
 - \frac{50}{25} - \frac{5}{9} = & - \frac{450}{225} - \frac{125}{225} = & - \frac{575}{225} = - \frac{23}{9} = -2,56 \\
 - \frac{3}{4} + \frac{6}{9} = & - \frac{27}{36} + \frac{24}{36} = & - \frac{3}{36} = - \frac{1}{12} \approx -0,08 \\
 - \frac{6}{7} + \frac{20}{9} = & - \frac{54}{63} + \frac{140}{63} = & \frac{86}{63} = \frac{86}{63} \approx 1,37 \\
 - \frac{4}{25} - \frac{5}{20} = & - \frac{16}{100} - \frac{25}{100} = & - \frac{41}{100} = - \frac{41}{100} = -0,41 \\
 + \frac{8}{10} - \frac{20}{5} = & + \frac{8}{10} - \frac{40}{10} = & - \frac{32}{10} = - \frac{16}{5} = -3,2 \\
 + \frac{6}{8} - \frac{10}{6} = & + \frac{18}{24} - \frac{40}{24} = & - \frac{22}{24} = - \frac{11}{12} = -0,92 \\
 - \frac{4}{7} - \frac{3}{9} = & - \frac{36}{63} - \frac{21}{63} = & - \frac{57}{63} = - \frac{19}{21} \approx -0,9 \\
 - \frac{20}{9} + \frac{3}{8} = & - \frac{160}{72} + \frac{27}{72} = & - \frac{133}{72} = - \frac{133}{72} = -1,85 \\
 - \frac{7}{20} + \frac{10}{20} = & - \frac{7}{20} + \frac{10}{20} = & \frac{3}{20} = \frac{3}{20} = 0,15 \\
 - \frac{4}{25} + \frac{7}{9} = & - \frac{36}{225} + \frac{175}{225} = & \frac{139}{225} = \frac{139}{225} \approx 0,62 \\
 - \frac{10}{4} - \frac{6}{25} = & - \frac{250}{100} - \frac{24}{100} = & - \frac{274}{100} = - \frac{137}{50} = -2,74 \\
 - \frac{4}{7} + \frac{20}{5} = & - \frac{20}{35} + \frac{140}{35} = & \frac{120}{35} = \frac{24}{7} \approx 3,43 \\
 - \frac{7}{50} + \frac{10}{25} = & - \frac{7}{50} + \frac{20}{50} = & \frac{13}{50} = \frac{13}{50} = 0,26 \\
 + \frac{6}{10} - \frac{20}{3} = & + \frac{18}{30} - \frac{200}{30} = & - \frac{182}{30} = - \frac{91}{15} = -6,07 \\
 - \frac{50}{8} - \frac{6}{50} = & - \frac{1250}{200} - \frac{24}{200} = & - \frac{1274}{200} = - \frac{637}{100} = -6,37 \\
 - \frac{25}{9} + \frac{20}{25} = & - \frac{625}{225} + \frac{180}{225} = & - \frac{445}{225} = - \frac{89}{45} = -1,98 \\
 - \frac{7}{10} - \frac{9}{20} = & - \frac{14}{20} - \frac{9}{20} = & - \frac{23}{20} = - \frac{23}{20} = -1,15 \\
 - \frac{8}{10} + \frac{8}{10} = & - \frac{8}{10} + \frac{8}{10} = & \frac{0}{10} = \frac{0}{1} = 0 \\
 + \frac{8}{20} + \frac{4}{5} = & + \frac{8}{20} + \frac{16}{20} = & \frac{24}{20} = \frac{6}{5} = 1,2 \\
 - \frac{25}{7} + \frac{9}{4} = & - \frac{100}{28} + \frac{63}{28} = & - \frac{37}{28} = - \frac{37}{28} \approx -1,32
 \end{array}$$

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$$\begin{array}{rcl}
 + \frac{8}{3} - \frac{20}{7} = & + \frac{56}{21} - \frac{60}{21} = & - \frac{4}{21} = - \frac{4}{21} \approx -0,19 \\
 - \frac{8}{9} + \frac{6}{20} = & - \frac{160}{180} + \frac{54}{180} = & - \frac{106}{180} = - \frac{53}{90} \approx -0,59 \\
 + \frac{6}{10} - \frac{7}{6} = & + \frac{18}{30} - \frac{35}{30} = & - \frac{17}{30} = - \frac{17}{30} \approx -0,57 \\
 + \frac{8}{50} + \frac{6}{6} = & + \frac{24}{150} + \frac{150}{150} = & \frac{174}{150} = \frac{29}{25} = 1,16 \\
 + \frac{4}{10} + \frac{9}{8} = & + \frac{16}{40} + \frac{45}{40} = & \frac{61}{40} = \frac{61}{40} \approx 1,53 \\
 - \frac{10}{5} + \frac{50}{25} = & - \frac{50}{25} + \frac{50}{25} = & \frac{0}{25} = \frac{0}{1} = 0 \\
 - \frac{6}{4} - \frac{25}{20} = & - \frac{30}{20} - \frac{25}{20} = & - \frac{55}{20} = - \frac{11}{4} \approx -2,75 \\
 - \frac{20}{50} - \frac{10}{5} = & - \frac{20}{50} - \frac{100}{50} = & - \frac{120}{50} = - \frac{12}{5} \approx -2,4 \\
 + \frac{3}{5} + \frac{7}{10} = & + \frac{6}{10} + \frac{7}{10} = & \frac{13}{10} = \frac{13}{10} = 1,3 \\
 + \frac{8}{4} - \frac{25}{4} = & + \frac{8}{4} - \frac{25}{4} = & - \frac{17}{4} = - \frac{17}{4} \approx -4,25 \\
 + \frac{8}{50} + \frac{10}{9} = & + \frac{72}{450} + \frac{500}{450} = & \frac{572}{450} = \frac{286}{225} = 1,27 \\
 - \frac{25}{6} + \frac{3}{20} = & - \frac{250}{60} + \frac{9}{60} = & - \frac{241}{60} = - \frac{241}{60} \approx -4,02 \\
 - \frac{25}{8} + \frac{9}{25} = & - \frac{625}{200} + \frac{72}{200} = & - \frac{553}{200} = - \frac{553}{200} \approx -2,77 \\
 + \frac{8}{7} + \frac{20}{25} = & + \frac{200}{175} + \frac{140}{175} = & \frac{340}{175} = \frac{68}{35} = 1,94 \\
 - \frac{4}{8} + \frac{9}{10} = & - \frac{20}{40} + \frac{36}{40} = & \frac{16}{40} = \frac{2}{5} = 0,4 \\
 + \frac{3}{5} + \frac{25}{10} = & + \frac{6}{10} + \frac{25}{10} = & \frac{31}{10} = \frac{31}{10} = 3,1 \\
 - \frac{6}{20} + \frac{7}{10} = & - \frac{6}{20} + \frac{14}{20} = & \frac{8}{20} = \frac{2}{5} = 0,4 \\
 - \frac{6}{50} - \frac{5}{6} = & - \frac{18}{150} - \frac{125}{150} = & - \frac{143}{150} = - \frac{143}{150} \approx -0,95 \\
 - \frac{4}{8} + \frac{20}{25} = & - \frac{100}{200} + \frac{160}{200} = & \frac{60}{200} = \frac{3}{10} = 0,3 \\
 + \frac{6}{5} - \frac{9}{25} = & + \frac{30}{25} - \frac{9}{25} = & \frac{21}{25} = \frac{21}{25} = 0,84
 \end{array}$$

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$$\begin{array}{rclclcl}
 -\frac{10}{10} + \frac{25}{4} & = & -\frac{20}{20} + \frac{125}{20} & = & \frac{105}{20} & = & \frac{21}{4} = 5,25 \\
 +\frac{10}{25} - \frac{20}{50} & = & +\frac{20}{50} - \frac{20}{50} & = & \frac{0}{50} & = & \frac{0}{1} = 0 \\
 +\frac{20}{9} - \frac{8}{10} & = & +\frac{200}{90} - \frac{72}{90} & = & \frac{128}{90} & = & \frac{64}{45} = 1,42 \\
 +\frac{3}{4} + \frac{6}{8} & = & +\frac{6}{8} + \frac{6}{8} & = & \frac{12}{8} & = & \frac{3}{2} = 1,5 \\
 -\frac{4}{6} - \frac{9}{10} & = & -\frac{20}{30} - \frac{27}{30} & = & -\frac{47}{30} & = & -\frac{47}{30} = -1,57 \\
 +\frac{9}{25} + \frac{5}{8} & = & +\frac{72}{200} + \frac{125}{200} & = & \frac{197}{200} & = & \frac{197}{200} \approx 0,99 \\
 -\frac{20}{5} - \frac{5}{10} & = & -\frac{40}{10} - \frac{5}{10} & = & -\frac{45}{10} & = & -\frac{9}{2} = -4,5 \\
 -\frac{6}{5} - \frac{5}{6} & = & -\frac{36}{30} - \frac{25}{30} & = & -\frac{61}{30} & = & -\frac{61}{30} \approx -2,03 \\
 +\frac{8}{20} - \frac{50}{7} & = & +\frac{56}{140} - \frac{1000}{140} & = & -\frac{944}{140} & = & -\frac{236}{35} \approx -6,74 \\
 +\frac{6}{4} + \frac{6}{9} & = & +\frac{54}{36} + \frac{24}{36} & = & \frac{78}{36} & = & \frac{13}{6} \approx 2,17 \\
 -\frac{9}{5} + \frac{4}{10} & = & -\frac{18}{10} + \frac{4}{10} & = & -\frac{14}{10} & = & -\frac{7}{5} = -1,4 \\
 +\frac{3}{9} - \frac{25}{3} & = & +\frac{3}{9} - \frac{75}{9} & = & -\frac{72}{9} & = & -\frac{8}{1} = -8 \\
 -\frac{7}{5} + \frac{4}{9} & = & -\frac{63}{45} + \frac{20}{45} & = & -\frac{43}{45} & = & -\frac{43}{45} = -0,96 \\
 -\frac{4}{20} - \frac{9}{25} & = & -\frac{20}{100} - \frac{36}{100} & = & -\frac{56}{100} & = & -\frac{14}{25} = -0,56 \\
 +\frac{10}{20} + \frac{8}{6} & = & +\frac{30}{60} + \frac{80}{60} & = & \frac{110}{60} & = & \frac{11}{6} = 1,83 \\
 +\frac{25}{7} + \frac{25}{20} & = & +\frac{500}{140} + \frac{175}{140} & = & \frac{675}{140} & = & \frac{135}{28} = 4,82 \\
 +\frac{4}{3} - \frac{25}{4} & = & +\frac{16}{12} - \frac{75}{12} & = & -\frac{59}{12} & = & -\frac{59}{12} = -4,92 \\
 -\frac{50}{5} + \frac{25}{8} & = & -\frac{400}{40} + \frac{125}{40} & = & -\frac{275}{40} & = & -\frac{55}{8} = -6,88 \\
 -\frac{7}{10} + \frac{9}{20} & = & -\frac{14}{20} + \frac{9}{20} & = & -\frac{5}{20} & = & -\frac{1}{4} = -0,25 \\
 +\frac{3}{4} + \frac{6}{10} & = & +\frac{15}{20} + \frac{12}{20} & = & \frac{27}{20} & = & \frac{27}{20} = 1,35
 \end{array}$$

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$$+\frac{25}{4} - \frac{9}{20} = +\frac{125}{20} - \frac{9}{20} = \frac{116}{20} = \frac{29}{5} = 5,8$$

$$+\frac{6}{7} - \frac{50}{25} = +\frac{150}{175} - \frac{350}{175} = -\frac{200}{175} = -\frac{8}{7} \approx -1,14$$

$$+\frac{3}{4} + \frac{10}{5} = +\frac{15}{20} + \frac{40}{20} = \frac{55}{20} = \frac{11}{4} = 2,75$$

$$-\frac{7}{3} - \frac{7}{6} = -\frac{14}{6} - \frac{7}{6} = -\frac{21}{6} = -\frac{7}{2} = -3,5$$

$$+\frac{5}{20} + \frac{10}{20} = +\frac{5}{20} + \frac{10}{20} = \frac{15}{20} = \frac{3}{4} = 0,75$$

$$+\frac{25}{50} + \frac{8}{4} = +\frac{50}{100} + \frac{200}{100} = \frac{250}{100} = \frac{5}{2} = 2,5$$

$$+\frac{6}{10} + \frac{20}{4} = +\frac{12}{20} + \frac{100}{20} = \frac{112}{20} = \frac{28}{5} = 5,6$$

$$-\frac{5}{9} + \frac{4}{20} = -\frac{100}{180} + \frac{36}{180} = -\frac{64}{180} = -\frac{16}{45} = -0,36$$

$$-\frac{5}{50} - \frac{20}{50} = -\frac{5}{50} - \frac{20}{50} = -\frac{25}{50} = -\frac{1}{2} = -0,5$$

$$-\frac{10}{4} + \frac{7}{4} = -\frac{10}{4} + \frac{7}{4} = -\frac{3}{4} = -\frac{3}{4} = -0,75$$

$$-\frac{10}{8} - \frac{6}{8} = -\frac{10}{8} - \frac{6}{8} = -\frac{16}{8} = -\frac{2}{1} = -2$$

$$-\frac{50}{4} + \frac{5}{6} = -\frac{150}{12} + \frac{10}{12} = -\frac{140}{12} = -\frac{35}{3} = -11,67$$

$$-\frac{50}{7} - \frac{20}{50} = -\frac{2500}{350} - \frac{140}{350} = -\frac{2640}{350} = -\frac{264}{35} \approx -7,54$$

$$+\frac{9}{8} + \frac{7}{3} = +\frac{27}{24} + \frac{56}{24} = \frac{83}{24} = \frac{83}{24} \approx 3,46$$

$$-\frac{7}{25} + \frac{9}{6} = -\frac{42}{150} + \frac{225}{150} = \frac{183}{150} = \frac{61}{50} = 1,22$$

$$-\frac{10}{4} - \frac{5}{7} = -\frac{70}{28} - \frac{20}{28} = -\frac{90}{28} = -\frac{45}{14} \approx -3,21$$

$$-\frac{6}{8} - \frac{7}{9} = -\frac{54}{72} - \frac{56}{72} = -\frac{110}{72} = -\frac{55}{36} = -1,53$$

$$+\frac{9}{6} + \frac{8}{25} = +\frac{225}{150} + \frac{48}{150} = \frac{273}{150} = \frac{91}{50} = 1,82$$

$$+\frac{20}{7} - \frac{6}{3} = +\frac{60}{21} - \frac{42}{21} = \frac{18}{21} = \frac{6}{7} \approx 0,86$$

$$-\frac{3}{6} - \frac{20}{7} = -\frac{21}{42} - \frac{120}{42} = -\frac{141}{42} = -\frac{47}{14} = -3,36$$

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$$\begin{array}{rcl}
 -\frac{25}{7} - \frac{10}{25} = & -\frac{625}{175} - \frac{70}{175} = & -\frac{695}{175} = -\frac{139}{35} \approx -3,97 \\
 +\frac{7}{25} - \frac{10}{8} = & +\frac{56}{200} - \frac{250}{200} = & -\frac{194}{200} = -\frac{97}{100} = -0,97 \\
 +\frac{8}{5} + \frac{6}{4} = & +\frac{32}{20} + \frac{30}{20} = & \frac{62}{20} = \frac{31}{10} = 3,1 \\
 +\frac{4}{7} + \frac{50}{20} = & +\frac{80}{140} + \frac{350}{140} = & \frac{430}{140} = \frac{43}{14} = 3,07 \\
 -\frac{9}{4} + \frac{20}{10} = & -\frac{45}{20} + \frac{40}{20} = & -\frac{5}{20} = -\frac{1}{4} = -0,25 \\
 +\frac{20}{25} + \frac{9}{9} = & +\frac{180}{225} + \frac{225}{225} = & \frac{405}{225} = \frac{9}{5} = 1,8 \\
 +\frac{5}{8} + \frac{4}{6} = & +\frac{15}{24} + \frac{16}{24} = & \frac{31}{24} = \frac{31}{24} = 1,29 \\
 +\frac{4}{50} + \frac{5}{4} = & +\frac{8}{100} + \frac{125}{100} = & \frac{133}{100} = \frac{133}{100} = 1,33 \\
 -\frac{4}{5} - \frac{9}{10} = & -\frac{8}{10} - \frac{9}{10} = & -\frac{17}{10} = -\frac{17}{10} = -1,7 \\
 -\frac{8}{25} - \frac{20}{10} = & -\frac{16}{50} - \frac{100}{50} = & -\frac{116}{50} = -\frac{58}{25} = -2,32 \\
 -\frac{5}{7} + \frac{10}{9} = & -\frac{45}{63} + \frac{70}{63} = & \frac{25}{63} = \frac{25}{63} \approx 0,4 \\
 +\frac{7}{10} - \frac{9}{4} = & +\frac{14}{20} - \frac{45}{20} = & -\frac{31}{20} = -\frac{31}{20} = -1,55 \\
 -\frac{8}{20} - \frac{10}{5} = & -\frac{8}{20} - \frac{40}{20} = & -\frac{48}{20} = -\frac{12}{5} = -2,4 \\
 -\frac{10}{7} - \frac{6}{25} = & -\frac{250}{175} - \frac{42}{175} = & -\frac{292}{175} = -\frac{292}{175} = -1,67 \\
 -\frac{5}{10} + \frac{6}{4} = & -\frac{10}{20} + \frac{30}{20} = & \frac{20}{20} = \frac{1}{1} = 1 \\
 -\frac{4}{3} + \frac{5}{6} = & -\frac{8}{6} + \frac{5}{6} = & -\frac{3}{6} = -\frac{1}{2} = -0,5 \\
 -\frac{20}{7} + \frac{25}{20} = & -\frac{400}{140} + \frac{175}{140} = & -\frac{225}{140} = -\frac{45}{28} = -1,61 \\
 +\frac{6}{9} - \frac{7}{20} = & +\frac{120}{180} - \frac{63}{180} = & \frac{57}{180} = \frac{19}{60} \approx 0,32 \\
 +\frac{9}{8} - \frac{5}{6} = & +\frac{27}{24} - \frac{20}{24} = & \frac{7}{24} = \frac{7}{24} = 0,29 \\
 +\frac{10}{5} - \frac{50}{5} = & +\frac{10}{5} - \frac{50}{5} = & -\frac{40}{5} = -\frac{8}{1} = -8
 \end{array}$$

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$$\begin{array}{rcl}
 + \frac{20}{10} - \frac{6}{8} = & + \frac{80}{40} - \frac{30}{40} = & \frac{50}{40} = \frac{5}{4} = 1,25 \\
 - \frac{8}{6} + \frac{50}{4} = & - \frac{16}{12} + \frac{150}{12} = & \frac{134}{12} = \frac{67}{6} \approx 11,17 \\
 + \frac{9}{7} - \frac{5}{10} = & + \frac{90}{70} - \frac{35}{70} = & \frac{55}{70} = \frac{11}{14} \approx 0,79 \\
 - \frac{10}{8} + \frac{6}{9} = & - \frac{90}{72} + \frac{48}{72} = & - \frac{42}{72} = - \frac{7}{12} \approx -0,58 \\
 + \frac{25}{8} + \frac{20}{3} = & + \frac{75}{24} + \frac{160}{24} = & \frac{235}{24} = \frac{235}{24} = 9,79 \\
 - \frac{10}{8} - \frac{7}{5} = & - \frac{50}{40} - \frac{56}{40} = & - \frac{106}{40} = - \frac{53}{20} = -2,65 \\
 + \frac{8}{4} - \frac{25}{20} = & + \frac{40}{20} - \frac{25}{20} = & \frac{15}{20} = \frac{3}{4} = 0,75 \\
 + \frac{6}{5} - \frac{10}{9} = & + \frac{54}{45} - \frac{50}{45} = & \frac{4}{45} = \frac{4}{45} \approx 0,09 \\
 - \frac{5}{8} + \frac{7}{10} = & - \frac{25}{40} + \frac{28}{40} = & \frac{3}{40} = \frac{3}{40} \approx 0,08 \\
 - \frac{5}{7} + \frac{6}{25} = & - \frac{125}{175} + \frac{42}{175} = & - \frac{83}{175} = - \frac{83}{175} \approx -0,47 \\
 + \frac{4}{8} - \frac{9}{5} = & + \frac{20}{40} - \frac{72}{40} = & - \frac{52}{40} = - \frac{13}{10} = -1,3 \\
 + \frac{20}{20} - \frac{6}{20} = & + \frac{20}{20} - \frac{6}{20} = & \frac{14}{20} = \frac{7}{10} = 0,7 \\
 + \frac{4}{6} + \frac{20}{50} = & + \frac{100}{150} + \frac{60}{150} = & \frac{160}{150} = \frac{16}{15} \approx 1,07 \\
 - \frac{10}{7} + \frac{4}{9} = & - \frac{90}{63} + \frac{28}{63} = & - \frac{62}{63} = - \frac{62}{63} \approx -0,98 \\
 - \frac{8}{9} - \frac{5}{50} = & - \frac{400}{450} - \frac{45}{450} = & - \frac{445}{450} = - \frac{89}{90} = -0,99 \\
 + \frac{4}{25} - \frac{5}{10} = & + \frac{8}{50} - \frac{25}{50} = & - \frac{17}{50} = - \frac{17}{50} = -0,34 \\
 + \frac{8}{4} + \frac{6}{25} = & + \frac{200}{100} + \frac{24}{100} = & \frac{224}{100} = \frac{56}{25} = 2,24 \\
 + \frac{3}{8} - \frac{4}{9} = & + \frac{27}{72} - \frac{32}{72} = & - \frac{5}{72} = - \frac{5}{72} = -0,07 \\
 + \frac{7}{8} + \frac{7}{8} = & + \frac{7}{8} + \frac{7}{8} = & \frac{14}{8} = \frac{7}{4} = 1,75 \\
 - \frac{9}{50} + \frac{20}{25} = & - \frac{9}{50} + \frac{40}{50} = & \frac{31}{50} = \frac{31}{50} = 0,62
 \end{array}$$

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$$+\frac{4}{8} - \frac{25}{10} = +\frac{20}{40} - \frac{100}{40} = -\frac{80}{40} = -\frac{2}{1} = -2$$

$$+\frac{8}{25} - \frac{4}{25} = +\frac{8}{25} - \frac{4}{25} = \frac{4}{25} = \frac{4}{25} = 0,16$$

$$+\frac{20}{25} - \frac{8}{25} = +\frac{20}{25} - \frac{8}{25} = \frac{12}{25} = \frac{12}{25} = 0,48$$

$$+\frac{6}{20} + \frac{50}{4} = +\frac{6}{20} + \frac{250}{20} = \frac{256}{20} = \frac{64}{5} = 12,8$$

$$-\frac{8}{4} - \frac{10}{4} = -\frac{8}{4} - \frac{10}{4} = -\frac{18}{4} = -\frac{9}{2} = -4,5$$

$$+\frac{4}{9} - \frac{6}{25} = +\frac{100}{225} - \frac{54}{225} = \frac{46}{225} = \frac{46}{225} = 0,2$$

$$-\frac{6}{25} + \frac{50}{9} = -\frac{54}{225} + \frac{1250}{225} = \frac{1196}{225} = \frac{1196}{225} \approx 5,32$$

$$+\frac{8}{6} - \frac{8}{7} = +\frac{56}{42} - \frac{48}{42} = \frac{8}{42} = \frac{4}{21} = 0,19$$

$$+\frac{50}{7} + \frac{8}{6} = +\frac{300}{42} + \frac{56}{42} = \frac{356}{42} = \frac{178}{21} \approx 8,48$$

$$+\frac{7}{4} - \frac{25}{10} = +\frac{35}{20} - \frac{50}{20} = -\frac{15}{20} = -\frac{3}{4} = -0,75$$

$$+\frac{5}{50} + \frac{9}{8} = +\frac{20}{200} + \frac{225}{200} = \frac{245}{200} = \frac{49}{40} \approx 1,23$$

$$+\frac{10}{3} + \frac{8}{6} = +\frac{20}{6} + \frac{8}{6} = \frac{28}{6} = \frac{14}{3} \approx 4,67$$

$$-\frac{10}{9} + \frac{3}{7} = -\frac{70}{63} + \frac{27}{63} = -\frac{43}{63} = -\frac{43}{63} \approx -0,68$$

$$-\frac{3}{6} - \frac{4}{7} = -\frac{21}{42} - \frac{24}{42} = -\frac{45}{42} = -\frac{15}{14} \approx -1,07$$

$$-\frac{10}{20} + \frac{50}{25} = -\frac{50}{100} + \frac{200}{100} = \frac{150}{100} = \frac{3}{2} = 1,5$$

$$+\frac{5}{25} + \frac{10}{7} = +\frac{35}{175} + \frac{250}{175} = \frac{285}{175} = \frac{57}{35} \approx 1,63$$

$$-\frac{10}{20} + \frac{7}{6} = -\frac{30}{60} + \frac{70}{60} = \frac{40}{60} = \frac{2}{3} \approx 0,67$$

$$+\frac{50}{10} + \frac{5}{10} = +\frac{50}{10} + \frac{5}{10} = \frac{55}{10} = \frac{11}{2} = 5,5$$

$$+\frac{4}{5} + \frac{25}{7} = +\frac{28}{35} + \frac{125}{35} = \frac{153}{35} = \frac{153}{35} = 4,37$$

$$-\frac{6}{4} + \frac{3}{10} = -\frac{30}{20} + \frac{6}{20} = -\frac{24}{20} = -\frac{6}{5} = -1,2$$

Übung Addition von Bruchzahlen, Hauptnenner, Kürzen, Darstellung als Dezimalzahl

$$\begin{array}{rcl}
 -\frac{9}{20} + \frac{8}{7} & = & -\frac{63}{140} + \frac{160}{140} = \frac{97}{140} = \frac{97}{140} = 0,69 \\
 -\frac{6}{9} + \frac{20}{50} & = & -\frac{300}{450} + \frac{180}{450} = -\frac{120}{450} = -\frac{4}{15} = -0,27 \\
 +\frac{10}{4} + \frac{5}{3} & = & +\frac{30}{12} + \frac{20}{12} = \frac{50}{12} = \frac{25}{6} \approx 4,17 \\
 -\frac{4}{7} + \frac{10}{4} & = & -\frac{16}{28} + \frac{70}{28} = \frac{54}{28} = \frac{27}{14} \approx 1,93 \\
 -\frac{5}{20} - \frac{8}{4} & = & -\frac{5}{20} - \frac{40}{20} = -\frac{45}{20} = -\frac{9}{4} = -2,25 \\
 +\frac{5}{9} + \frac{8}{50} & = & +\frac{250}{450} + \frac{72}{450} = \frac{322}{450} = \frac{161}{225} \approx 0,72 \\
 +\frac{5}{25} + \frac{7}{20} & = & +\frac{20}{100} + \frac{35}{100} = \frac{55}{100} = \frac{11}{20} = 0,55 \\
 +\frac{20}{7} + \frac{6}{50} & = & +\frac{1000}{350} + \frac{42}{350} = \frac{1042}{350} = \frac{521}{175} \approx 2,98 \\
 +\frac{4}{6} + \frac{20}{7} & = & +\frac{28}{42} + \frac{120}{42} = \frac{148}{42} = \frac{74}{21} = 3,52 \\
 +\frac{20}{8} - \frac{3}{10} & = & +\frac{100}{40} - \frac{12}{40} = \frac{88}{40} = \frac{11}{5} = 2,2 \\
 +\frac{20}{8} + \frac{9}{20} & = & +\frac{100}{40} + \frac{18}{40} = \frac{118}{40} = \frac{59}{20} = 2,95 \\
 +\frac{4}{50} - \frac{5}{4} & = & +\frac{8}{100} - \frac{125}{100} = -\frac{117}{100} = -\frac{117}{100} = -1,17 \\
 +\frac{8}{8} + \frac{6}{4} & = & +\frac{8}{8} + \frac{12}{8} = \frac{20}{8} = \frac{5}{2} = 2,5 \\
 -\frac{10}{8} - \frac{7}{10} & = & -\frac{50}{40} - \frac{28}{40} = -\frac{78}{40} = -\frac{39}{20} = -1,95 \\
 -\frac{20}{9} - \frac{20}{6} & = & -\frac{40}{18} - \frac{60}{18} = -\frac{100}{18} = -\frac{50}{9} = -5,56 \\
 -\frac{9}{50} + \frac{6}{25} & = & -\frac{9}{50} + \frac{12}{50} = \frac{3}{50} = \frac{3}{50} = 0,06 \\
 -\frac{4}{6} + \frac{9}{5} & = & -\frac{20}{30} + \frac{54}{30} = \frac{34}{30} = \frac{17}{15} = 1,13 \\
 -\frac{7}{20} + \frac{20}{9} & = & -\frac{63}{180} + \frac{400}{180} = \frac{337}{180} = \frac{337}{180} = 1,87 \\
 +\frac{6}{25} - \frac{50}{3} & = & +\frac{18}{75} - \frac{1250}{75} = -\frac{1232}{75} = -\frac{1232}{75} = -16,43 \\
 +\frac{4}{25} + \frac{8}{7} & = & +\frac{28}{175} + \frac{200}{175} = \frac{228}{175} = \frac{228}{175} = 1,3
 \end{array}$$

Übung Addition von Bruchzahlen, Hauptnenner, Kürzen, Darstellung als Dezimalzahl

$$+\frac{25}{3} - \frac{50}{7} = +\frac{175}{21} - \frac{150}{21} = \frac{25}{21} = \frac{25}{21} = 1,19$$

$$+\frac{20}{8} - \frac{5}{20} = +\frac{100}{40} - \frac{10}{40} = \frac{90}{40} = \frac{9}{4} = 2,25$$

$$-\frac{50}{5} + \frac{7}{5} = -\frac{50}{5} + \frac{7}{5} = -\frac{43}{5} = -\frac{43}{5} = -8,6$$

$$+\frac{9}{3} - \frac{20}{3} = +\frac{9}{3} - \frac{20}{3} = -\frac{11}{3} = -\frac{11}{3} = -3,67$$

$$-\frac{9}{5} + \frac{50}{3} = -\frac{27}{15} + \frac{250}{15} = \frac{223}{15} = \frac{223}{15} \approx 14,87$$

$$+\frac{5}{9} + \frac{6}{7} = +\frac{35}{63} + \frac{54}{63} = \frac{89}{63} = \frac{89}{63} = 1,41$$

$$+\frac{9}{7} - \frac{10}{9} = +\frac{81}{63} - \frac{70}{63} = \frac{11}{63} = \frac{11}{63} = 0,17$$

$$+\frac{25}{8} + \frac{7}{6} = +\frac{75}{24} + \frac{28}{24} = \frac{103}{24} = \frac{103}{24} = 4,29$$

$$+\frac{4}{25} - \frac{50}{9} = +\frac{36}{225} - \frac{1250}{225} = -\frac{1214}{225} = -\frac{1214}{225} = -5,4$$

$$-\frac{6}{5} - \frac{10}{9} = -\frac{54}{45} - \frac{50}{45} = -\frac{104}{45} = -\frac{104}{45} \approx -2,31$$

$$-\frac{25}{8} + \frac{4}{10} = -\frac{125}{40} + \frac{16}{40} = -\frac{109}{40} = -\frac{109}{40} = -2,73$$

$$-\frac{7}{10} - \frac{20}{7} = -\frac{49}{70} - \frac{200}{70} = -\frac{249}{70} = -\frac{249}{70} = -3,56$$

$$+\frac{4}{6} + \frac{4}{3} = +\frac{4}{6} + \frac{8}{6} = \frac{12}{6} = \frac{2}{1} = 2$$

$$+\frac{6}{7} + \frac{5}{8} = +\frac{48}{56} + \frac{35}{56} = \frac{83}{56} = \frac{83}{56} = 1,48$$

$$+\frac{10}{8} + \frac{5}{7} = +\frac{70}{56} + \frac{40}{56} = \frac{110}{56} = \frac{55}{28} = 1,96$$

$$-\frac{8}{9} + \frac{10}{3} = -\frac{8}{9} + \frac{30}{9} = \frac{22}{9} = \frac{22}{9} = 2,44$$

$$+\frac{3}{25} - \frac{10}{5} = +\frac{3}{25} - \frac{50}{25} = -\frac{47}{25} = -\frac{47}{25} = -1,88$$

$$-\frac{4}{25} + \frac{50}{9} = -\frac{36}{225} + \frac{1250}{225} = \frac{1214}{225} = \frac{1214}{225} \approx 5,4$$

$$-\frac{9}{8} + \frac{7}{50} = -\frac{225}{200} + \frac{28}{200} = -\frac{197}{200} = -\frac{197}{200} = -0,99$$

$$+\frac{20}{10} + \frac{5}{7} = +\frac{140}{70} + \frac{50}{70} = \frac{190}{70} = \frac{19}{7} = 2,71$$

Übung Addition von Bruchzahlen, Hauptnenner, Kürzen, Darstellung als Dezimalzahl

$$\begin{array}{rcl}
 -\frac{10}{50} - \frac{4}{20} = & -\frac{20}{100} - \frac{20}{100} = & -\frac{40}{100} = -\frac{2}{5} = -0,4 \\
 +\frac{9}{25} - \frac{50}{7} = & +\frac{63}{175} - \frac{1250}{175} = & -\frac{1187}{175} = -\frac{1187}{175} \approx -6,78 \\
 +\frac{50}{4} + \frac{20}{10} = & +\frac{250}{20} + \frac{40}{20} = & \frac{290}{20} = \frac{29}{2} = 14,5 \\
 +\frac{20}{9} + \frac{5}{25} = & +\frac{500}{225} + \frac{45}{225} = & \frac{545}{225} = \frac{109}{45} = 2,42 \\
 +\frac{6}{4} + \frac{10}{25} = & +\frac{150}{100} + \frac{40}{100} = & \frac{190}{100} = \frac{19}{10} = 1,9 \\
 +\frac{7}{9} - \frac{50}{5} = & +\frac{35}{45} - \frac{450}{45} = & -\frac{415}{45} = -\frac{83}{9} \approx -9,22 \\
 +\frac{5}{4} - \frac{10}{50} = & +\frac{125}{100} - \frac{20}{100} = & \frac{105}{100} = \frac{21}{20} = 1,05 \\
 +\frac{7}{20} - \frac{25}{6} = & +\frac{21}{60} - \frac{250}{60} = & -\frac{229}{60} = -\frac{229}{60} = -3,82 \\
 +\frac{4}{25} - \frac{8}{20} = & +\frac{16}{100} - \frac{40}{100} = & -\frac{24}{100} = -\frac{6}{25} = -0,24 \\
 -\frac{7}{10} + \frac{7}{9} = & -\frac{63}{90} + \frac{70}{90} = & \frac{7}{90} = \frac{7}{90} \approx 0,08 \\
 +\frac{6}{50} + \frac{5}{20} = & +\frac{12}{100} + \frac{25}{100} = & \frac{37}{100} = \frac{37}{100} = 0,37 \\
 -\frac{20}{9} - \frac{25}{8} = & -\frac{160}{72} - \frac{225}{72} = & -\frac{385}{72} = -\frac{385}{72} = -5,35 \\
 -\frac{7}{4} + \frac{20}{10} = & -\frac{35}{20} + \frac{40}{20} = & \frac{5}{20} = \frac{1}{4} = 0,25 \\
 +\frac{50}{7} - \frac{10}{4} = & +\frac{200}{28} - \frac{70}{28} = & \frac{130}{28} = \frac{65}{14} = 4,64 \\
 +\frac{9}{10} - \frac{9}{8} = & +\frac{36}{40} - \frac{45}{40} = & -\frac{9}{40} = -\frac{9}{40} = -0,23 \\
 -\frac{10}{6} - \frac{25}{4} = & -\frac{20}{12} - \frac{75}{12} = & -\frac{95}{12} = -\frac{95}{12} = -7,92 \\
 -\frac{7}{7} + \frac{20}{4} = & -\frac{28}{28} + \frac{140}{28} = & \frac{112}{28} = \frac{4}{1} = 4 \\
 +\frac{9}{4} + \frac{25}{8} = & +\frac{18}{8} + \frac{25}{8} = & \frac{43}{8} = \frac{43}{8} \approx 5,38 \\
 -\frac{9}{3} - \frac{9}{6} = & -\frac{18}{6} - \frac{9}{6} = & -\frac{27}{6} = -\frac{9}{2} = -4,5 \\
 -\frac{5}{3} - \frac{9}{20} = & -\frac{100}{60} - \frac{27}{60} = & -\frac{127}{60} = -\frac{127}{60} = -2,12
 \end{array}$$