

Lösungen zu den zusammenfassenden Übungen zu Brüchen

$\frac{2}{3} + \frac{5}{6} - \frac{5}{12}$	$\frac{8}{12} + \frac{10}{12} - \frac{5}{12} = \frac{13}{12} \quad (1\frac{1}{12})$
$\frac{5}{30} + \frac{8}{15} - \frac{3}{20}$	$\frac{10}{60} + \frac{32}{60} - \frac{9}{60} = \frac{33}{60} = \frac{11}{20}$
$\frac{14}{33} - \frac{5}{22} + \frac{3}{11}$	$\frac{28}{66} - \frac{15}{66} + \frac{18}{66} = \frac{31}{66}$
$-\frac{5}{24} + \frac{7}{16} - \frac{1}{48}$	$-\frac{10}{48} + \frac{21}{48} - \frac{1}{48} = \frac{10}{48} = \frac{5}{24}$
$\frac{49}{18} \cdot \frac{3}{14} + \frac{5}{6}$	$\frac{7}{6} \cdot \frac{1}{2} + \frac{5}{6} = \frac{7}{12} + \frac{5}{6} = \frac{7}{12} + \frac{10}{12} = \frac{17}{12} \quad (1\frac{5}{12})$
$\frac{8}{21} - \frac{25}{14} \cdot \frac{7}{15}$	$\frac{8}{21} - \frac{5}{2} \cdot \frac{1}{3} = \frac{8}{21} - \frac{5}{6} = \frac{48}{126} - \frac{105}{126} = -\frac{57}{126} = -\frac{19}{42}$
$\frac{15}{16} \cdot \frac{12}{5} - \frac{3}{8} \cdot \frac{2}{5}$	$\frac{9}{4} - \frac{3}{20} = \frac{45}{20} - \frac{3}{20} = \frac{42}{20} = \frac{21}{10} \quad (2\frac{1}{10})$
$\frac{2}{3} + \frac{5}{9} - \frac{121}{18} \cdot \frac{5}{11}$	$\frac{2}{3} + \frac{5}{9} - \frac{55}{18} = \frac{12}{18} + \frac{10}{18} - \frac{55}{18} = -\frac{33}{18} = -\frac{11}{6} \quad (-1\frac{5}{6})$
$\frac{12}{5} \cdot (\frac{2}{49} + \frac{3}{14})$	$\frac{12}{5} \cdot (\frac{4}{98} + \frac{21}{98}) = \frac{12}{5} \cdot \frac{25}{98} = \frac{30}{49}$
$\frac{36}{75} \cdot \frac{2}{5} + \frac{64}{125} \cdot \frac{25}{16}$	$\frac{36}{75} \cdot \frac{2}{5} + \frac{4}{5} = \frac{18}{15} + \frac{4}{5} = \frac{18}{15} + \frac{12}{15} = \frac{30}{15} = 2$
$(\frac{3}{36} + \frac{7}{144}) \cdot \frac{12}{19}$	$(\frac{12}{144} + \frac{7}{144}) \cdot \frac{12}{19} = \frac{19}{144} \cdot \frac{12}{19} = \frac{1}{12}$
$\frac{3}{7} \cdot \frac{14}{9} - \frac{5}{14}$	$\frac{3}{7} \cdot \frac{9}{14} - \frac{5}{14} = \frac{27}{98} - \frac{5}{14} = \frac{27}{98} - \frac{35}{98} = -\frac{8}{98} = -\frac{4}{49}$
$\frac{21}{18} \cdot \frac{36}{35} \cdot \frac{45}{63} + 3$	$\frac{6}{7} + 3 = \frac{6}{7} + \frac{21}{7} = \frac{27}{7} \quad (3\frac{6}{7})$
$\frac{5}{21} + \frac{27}{42} \cdot \frac{9}{14} - \frac{5}{14}$	$\frac{5}{21} + \frac{27}{42} \cdot \frac{14}{9} - \frac{5}{14} = \frac{5}{21} + 1 - \frac{5}{14} = \frac{10}{42} + \frac{42}{42} - \frac{15}{42} = \frac{37}{42}$
$-\frac{39}{18} \cdot \frac{65}{36} - \frac{1}{32}$	$-\frac{39}{18} \cdot \frac{36}{65} - \frac{1}{32} = -\frac{6}{5} - \frac{1}{32} = -\frac{192}{160} - \frac{5}{160} = -\frac{197}{160} \quad (-1\frac{37}{160})$