

Lösung zu den Aufgaben zur Division von Brüchen

$\frac{2}{3} : \frac{5}{7}$	$\frac{2}{3} \cdot \frac{7}{5} = \frac{14}{15}$
$\frac{12}{13} : \frac{16}{7}$	$\frac{12}{13} \cdot \frac{7}{16} = \frac{3}{13} \cdot \frac{7}{4} = \frac{21}{52}$
$\frac{12}{17} : \frac{3}{34}$	$\frac{12}{17} \cdot \frac{34}{3} = \frac{4}{1} \cdot \frac{2}{1} = 8$
$\frac{56}{45} : \frac{21}{20}$	$\frac{56}{45} \cdot \frac{20}{21} = \frac{8}{9} \cdot \frac{4}{3} = \frac{32}{27}$
$\frac{6}{35} : \frac{2}{7}$	$\frac{6}{35} \cdot \frac{7}{2} = \frac{3}{5} \cdot \frac{1}{1} = \frac{3}{5}$
$\frac{12}{45} : \frac{16}{9}$	$\frac{12}{45} \cdot \frac{9}{16} = \frac{3}{5} \cdot \frac{1}{4} = \frac{3}{20}$
$\frac{7}{8} : 3$	$\frac{7}{8} : \frac{3}{1} = \frac{7}{8} \cdot \frac{1}{3} = \frac{7}{24}$
$-\frac{18}{3} : \frac{9}{7}$	$-\frac{18}{3} \cdot \frac{7}{9} = -\frac{2}{3} \cdot \frac{7}{1} = -\frac{14}{3}$
$\frac{32}{21} : (-\frac{20}{49})$	$-\frac{32}{21} \cdot \frac{49}{20} = -\frac{8}{3} \cdot \frac{7}{5} = -\frac{56}{15}$
$(-\frac{28}{81}) : (-\frac{35}{27})$	$\frac{28}{81} \cdot \frac{27}{35} = \frac{4}{3} \cdot \frac{1}{5} = \frac{4}{15}$
$-7 : \frac{2}{3}$	$-7 : \frac{2}{3} = -\frac{7}{1} \cdot \frac{3}{2} = -\frac{21}{2}$
$\frac{-7}{8} : -\frac{21}{3}$	$\frac{7}{8} \cdot \frac{3}{21} = \frac{1}{8}$
$\frac{-7}{8} : \frac{-2}{3}$	$\frac{7}{8} : \frac{2}{3} = \frac{7}{8} \cdot \frac{3}{2} = \frac{21}{16}$

$\frac{14}{9} \cdot \frac{3}{5} \cdot \frac{25}{12}$	$\begin{aligned} \left(\frac{14}{9} \cdot \frac{3}{5}\right) \cdot \frac{25}{12} &= \left(\frac{14}{9} \cdot \frac{5}{3}\right) \cdot \frac{25}{12} \\ &= \left(\frac{70}{27}\right) \cdot \frac{25}{12} = \frac{70}{27} \cdot \frac{12}{25} \\ &= \frac{14}{9} \cdot \frac{4}{5} \\ &= \frac{56}{45} \end{aligned}$
$\left(\frac{7}{3} \cdot \frac{4}{5}\right) \cdot \left(\frac{-5}{36} \cdot \frac{9}{8}\right)$	$\begin{aligned} \left(\frac{7}{3} \cdot \frac{4}{5}\right) \cdot \left(\frac{-5}{36} \cdot \frac{9}{8}\right) \\ &= \left(\frac{7}{3} \cdot \frac{5}{4}\right) \cdot \left(\frac{-5}{36} \cdot \frac{8}{9}\right) \\ &= \frac{35}{12} \cdot \left(\frac{-5}{9} \cdot \frac{2}{9}\right) \\ &= \frac{35}{12} \cdot \left(\frac{-10}{81}\right) \\ &= \frac{35}{12} \cdot \left(\frac{81}{-10}\right) \\ &= -\frac{7}{4} \cdot \frac{27}{2} \\ &= -\frac{189}{8} \end{aligned}$