

Addition:

$$\frac{15}{23} + \frac{28}{7} = \frac{15}{23} + \frac{4}{1} = 4\frac{15}{23}$$

$$\frac{4}{9} + \frac{23}{81} = \frac{36}{81} + \frac{23}{81} = \frac{59}{81}$$

$$\frac{12}{83} + \frac{2}{166} = \frac{12}{83} + \frac{1}{83} = \frac{13}{83}$$

$$\frac{1}{90} + \frac{9}{135} = \frac{1}{90} + \frac{1}{15} = \frac{1}{90} + \frac{6}{90} = \frac{7}{90}$$

Subtraktion:

$$\frac{17}{9} - \frac{11}{18} = \frac{34}{18} - \frac{11}{18} = \frac{23}{18} = 1\frac{5}{18}$$

$$\frac{27}{8} - \frac{15}{20} = \frac{135}{40} - \frac{30}{40} = \frac{105}{40} = 2\frac{25}{40} = 2\frac{5}{8}$$

$$\frac{53}{45} - \frac{72}{135} = \frac{159}{135} - \frac{72}{135} = \frac{87}{135} = \frac{29}{45}$$

$$\frac{37}{47} - \frac{1}{2} = \frac{74}{94} - \frac{47}{94} = \frac{27}{94}$$

Gemischte Aufgaben:

$$\frac{39}{40} + \frac{1}{7} * \frac{4}{14} + \frac{3}{8} = \frac{39}{40} + \frac{1}{7} * \frac{2}{7} + \frac{15}{40} = \frac{54}{40} + \frac{2}{49} = \frac{27}{20} + \frac{2}{49} = \frac{1323}{980} + \frac{40}{980} = \frac{1363}{980} = 1\frac{383}{980}$$

$$\frac{7}{3} - \frac{2}{18} * \frac{100}{45} + \frac{1}{2} = \frac{14}{6} - \frac{1}{9} * \frac{20}{9} + \frac{3}{6} = \frac{17}{6} - \frac{20}{81} = \frac{459}{162} - \frac{40}{162} = \frac{419}{162} = 2\frac{95}{162}$$

$$\frac{34}{7} * \frac{4}{3} * \frac{7}{9} * \frac{64}{7} + \frac{2}{12} = \frac{34}{1} * \frac{4}{3} * \frac{1}{9} * \frac{64}{7} + \frac{2}{12} = \frac{8704}{189} + \frac{2}{12} = \frac{34816}{756} + \frac{126}{756} = \frac{34942}{756} = \frac{17471}{378}$$

$$= 46\frac{83}{378}$$

$$\frac{48}{106} + \frac{72}{132} - \frac{3}{53} - \frac{48}{159} = \frac{24}{53} + \frac{6}{11} - \frac{3}{53} - \frac{16}{53} = \frac{5}{53} + \frac{6}{11} = \frac{55}{583} + \frac{318}{583} = \frac{373}{583}$$