

# Übungen zur Bruchrechnung I

Bitte alle Ergebnisse wenn möglich kürzen und unechte Brüche in gemischte Brüche umwandeln! (Quersumme in der Klammer)

## 1. Addition

$$1a) \frac{1}{4} + \frac{2}{4} = (7) \quad d) \frac{1}{5} + \frac{3}{10} = (3) \quad g) 4\frac{1}{3} + 2\frac{1}{2} = (17)$$

$$\frac{3}{8} + \frac{2}{8} = (13) \quad \frac{1}{2} + \frac{1}{4} = (7) \quad 2\frac{3}{4} + \frac{1}{8} + 1\frac{1}{2} = (15)$$

$$\frac{1}{5} + \frac{3}{5} = (9) \quad \frac{1}{6} + \frac{2}{3} = (11) \quad 5\frac{4}{5} + 2\frac{1}{6} + 3\frac{1}{3} = (24)$$

$$\frac{4}{7} + \frac{2}{7} = (13) \quad \frac{3}{8} + \frac{1}{4} = (13) \quad 8\frac{1}{2} + \frac{3}{4} + 4 = (18)$$

$$b) 2\frac{2}{5} + \frac{1}{5} = (10) \quad e) \frac{1}{3} + \frac{1}{4} = (19) \quad 4\frac{1}{5} + 8 + 2\frac{1}{2} = (31)$$

$$\frac{3}{8} + 4\frac{2}{8} = (17) \quad \frac{2}{5} + \frac{1}{3} = (26) \quad 3\frac{3}{8} + 2\frac{1}{2} + \frac{4}{5} = (73)$$

$$5\frac{4}{9} + 2\frac{3}{9} = (23) \quad \frac{4}{7} + \frac{1}{6} = (73) \quad 6\frac{3}{4} + 8\frac{1}{3} + 5 = (33)$$

$$2\frac{1}{8} + 7\frac{6}{8} = (24) \quad \frac{1}{2} + \frac{2}{5} = (19) \quad 2 + \frac{1}{3} + 1\frac{1}{2} = (14)$$

$$c) \frac{1}{6} + \frac{2}{6} = (3) \quad f) 1\frac{4}{5} + \frac{1}{6} = (66) \quad 7\frac{4}{7} + \frac{1}{5} + 3 = (72)$$

$$\frac{4}{8} + \frac{2}{8} = (10) \quad \frac{2}{3} + 2\frac{1}{8} = (45) \quad 8\frac{1}{2} + 1\frac{1}{3} + 2\frac{1}{4} = (25)$$

$$\frac{3}{5} + \frac{2}{5} = (1) \quad 4\frac{2}{3} + 1\frac{1}{4} = (28) \quad 7\frac{4}{9} + \frac{1}{3} + 1\frac{2}{3} = (22)$$

$$\frac{2}{3} + \frac{2}{3} = (5) \quad \frac{3}{4} + \frac{4}{5} = (32) \quad 14 + \frac{1}{14} + \frac{14}{1} = (43)$$

$$\frac{4}{5} + \frac{3}{5} = (8) \quad \frac{4}{7} + \frac{5}{8} = (78) \quad 3\frac{3}{11} + 1\frac{1}{11} + \frac{4}{22} = (21)$$

$$1\frac{3}{4} + \frac{2}{4} = (7) \quad 2\frac{3}{5} + 1\frac{5}{6} = (47) \quad 5\frac{7}{21} + 2\frac{8}{24} + \frac{3}{12} = (30)$$

$$3\frac{4}{7} + 2\frac{5}{7} = (15) \quad 6\frac{5}{8} + 3\frac{2}{3} = (41) \quad 4\frac{1}{2} + 1\frac{15}{30} + \frac{25}{50} = (9)$$

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# Übungen zur Bruchrechnung II

## 2. Subtraktion

## 3. Addition/Subtraktion

$$2a) \frac{4}{5} - \frac{3}{5} = (6) \quad 4) 1\frac{1}{5} - \frac{2}{5} = (9) \quad 3a) \frac{4}{5} + \frac{3}{5} - \frac{2}{5} = (1)$$

$$\frac{2}{3} - \frac{1}{3} = (4) \quad 1\frac{3}{8} - \frac{5}{8} = (7) \quad \frac{7}{8} - \frac{3}{8} + \frac{2}{8} = (7)$$

$$\frac{8}{9} - \frac{3}{9} = (14) \quad 2\frac{4}{5} - \frac{9}{10} = (20) \quad 4\frac{4}{7} + 1\frac{3}{7} - 2\frac{1}{7} = (16)$$

$$\frac{6}{7} - \frac{3}{7} = (10) \quad 3\frac{1}{2} - \frac{3}{4} = (9) \quad 6\frac{3}{4} + \frac{2}{4} - 4\frac{1}{4} = (3)$$

$$b) 3\frac{3}{4} - \frac{1}{4} = (6) \quad f) 4\frac{2}{3} - 3\frac{3}{4} = (23) \quad h) \frac{4}{5} - \frac{3}{10} + \frac{1}{5} = (17)$$

$$4\frac{5}{6} - \frac{3}{6} = (8) \quad 6\frac{3}{5} - 4\frac{5}{6} = (54) \quad 2\frac{3}{4} - 1\frac{1}{4} + 4\frac{3}{8} = (20)$$

$$7\frac{3}{5} - 2\frac{1}{5} = (12) \quad 7\frac{4}{7} - 3\frac{4}{5} = (65) \quad \frac{1}{2} + \frac{1}{4} - \frac{1}{8} = (13)$$

$$5\frac{3}{8} - 2\frac{1}{8} = (8) \quad 5\frac{9}{10} - 2\frac{14}{15} = (61) \quad 4\frac{3}{5} - 2\frac{3}{10} + 1\frac{17}{20} = (27)$$

$$c) 4\frac{3}{4} - 2\frac{1}{2} = (7) \quad g) 3\frac{1}{2} - 1\frac{1}{3} - \frac{1}{5} = (60) \quad i) 1\frac{3}{4} + \frac{2}{5} - 1\frac{1}{2} = (33)$$

$$5\frac{8}{11} - 3\frac{5}{11} = (16) \quad 2\frac{3}{4} - \frac{1}{5} - 1\frac{1}{8} = (58) \quad 2\frac{5}{6} - 1\frac{1}{4} + 3\frac{2}{5} = (123)$$

$$3\frac{7}{8} - 2\frac{3}{4} = (10) \quad 6\frac{2}{3} - 3\frac{1}{8} - \frac{1}{3} = (42) \quad 5\frac{7}{8} - 2\frac{3}{5} + 1\frac{1}{2} = (75)$$

$$6\frac{2}{3} - 1\frac{1}{6} = (8) \quad 5\frac{6}{7} - \frac{2}{9} - \frac{1}{3} = (87) \quad 3\frac{3}{4} + 1\frac{2}{3} - 4\frac{1}{6} = (6)$$

$$d) 2\frac{2}{5} - 1\frac{1}{4} = (28) \quad h) 3\frac{1}{2} - \frac{2}{3} - \frac{1}{4} = (21) \quad d) 3\frac{1}{4} - 2\frac{1}{3} + 1\frac{4}{5} = (105)$$

$$2\frac{4}{7} - \frac{1}{5} = (50) \quad 4\frac{3}{4} - 2\frac{5}{8} - \frac{2}{3} = (36) \quad 2\frac{4}{5} - 1\frac{5}{6} + \frac{3}{4} = (104)$$

$$5\frac{3}{4} - 3\frac{4}{9} = (49) \quad 5\frac{1}{8} - 1\frac{3}{4} - 1\frac{1}{2} = (16) \quad 1\frac{4}{7} + \frac{1}{2} - \frac{3}{5} = (104)$$

$$2\frac{3}{8} - 2\frac{2}{9} = (25) \quad 7\frac{4}{7} - \frac{1}{9} - 3\frac{2}{3} = (117) \quad \frac{8}{9} - 2\frac{3}{4} + 3\frac{1}{2} = (60)$$

$$6\frac{4}{9} - 5\frac{3}{8} = (78) \quad 6\frac{2}{5} - 3\frac{3}{5} - \frac{4}{5} = (2) \quad 1\frac{1}{2} - 2\frac{5}{6} + 4\frac{1}{3} = (3)$$

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# Übungen zur Bruchrechnung III

## 3. Multiplikation

## 4. Division

$$3a) \frac{3}{4} \cdot \frac{1}{2} = (11)$$

$$4a) \frac{5}{6} : \frac{1}{3} = (5)$$

$$\frac{4}{5} \cdot \frac{2}{3} = (23)$$

$$\frac{8}{9} : \frac{3}{4} = (33)$$

$$\frac{6}{7} \cdot \frac{3}{5} = (53)$$

$$\frac{6}{7} : \frac{5}{6} = (37)$$

$$\frac{4}{5} \cdot \frac{1}{2} = (7)$$

$$\frac{3}{8} : \frac{1}{4} = (4)$$

$$\frac{1}{6} \cdot \frac{3}{7} = (15)$$

$$\frac{7}{10} : \frac{14}{15} = (7)$$

$$b) \frac{3}{2} \cdot \frac{4}{3} = (2)$$

$$b) \frac{4}{3} : \frac{5}{2} = (23)$$

$$\frac{5}{6} \cdot \frac{7}{4} = (36)$$

$$\frac{7}{2} : \frac{8}{5} = (21)$$

$$\frac{8}{3} \cdot \frac{9}{2} = (12)$$

$$\frac{6}{5} : \frac{11}{3} = (73)$$

$$1\frac{4}{5} \cdot \frac{4}{7} = (37)$$

$$3\frac{4}{5} : \frac{1}{2} = (15)$$

$$\frac{3}{4} \cdot 2\frac{2}{3} = (2)$$

$$\frac{2}{3} : 1\frac{3}{4} = (29)$$

$$5\frac{4}{9} \cdot 3\frac{3}{7} = (23)$$

$$2\frac{5}{6} : 1\frac{3}{5} = (86)$$

$$1\frac{4}{5} \cdot 2\frac{2}{3} = (13)$$

$$3\frac{4}{7} : 2\frac{1}{2} = (11)$$

$$c) \frac{3}{4} \cdot \frac{5}{7} \cdot \frac{1}{2} = (71)$$

$$c) \frac{3}{4} : \frac{3}{5} : \frac{3}{6} = (5)$$

$$2\frac{1}{3} \cdot \frac{3}{5} \cdot \frac{1}{4} = (27)$$

$$1\frac{4}{5} : \frac{2}{3} : \frac{1}{2} = (13)$$

$$6\frac{1}{2} \cdot \frac{1}{8} \cdot \frac{4}{5} = (33)$$

$$2\frac{1}{3} : 2\frac{1}{4} : 2\frac{1}{6} = (173)$$

$$1\frac{3}{4} \cdot 2\frac{1}{2} \cdot 1\frac{4}{5} = (22)$$

$$\frac{5}{6} : \frac{1}{6} : \frac{1}{6} = (30)$$

$$5\frac{4}{7} \cdot \frac{1}{8} \cdot 1\frac{14}{15} = (378)$$

$$1\frac{4}{5} : 2\frac{4}{5} : 3\frac{4}{5} = (311)$$

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