

# Aufgabenblatt Brüche addieren

## Lösungen

$$1. \frac{1}{3} + \frac{3}{22} = \frac{1 \cdot 22}{3 \cdot 22} + \frac{3 \cdot 3}{22 \cdot 3} = \frac{22}{66} + \frac{9}{66} = \frac{31}{66}$$

$$2. \frac{1}{3} + \frac{1}{8} = \frac{1 \cdot 8}{3 \cdot 8} + \frac{1 \cdot 3}{8 \cdot 3} = \frac{8}{24} + \frac{3}{24} = \frac{11}{24}$$

$$3. \frac{8}{13} + \frac{7}{78} = \frac{8 \cdot 6}{13 \cdot 6} + \frac{7}{78} = \frac{48}{78} + \frac{7}{78} = \frac{55}{78}$$

$$4. \frac{17}{30} + \frac{7}{45} = \frac{17 \cdot 3}{30 \cdot 3} + \frac{7 \cdot 2}{45 \cdot 2} = \frac{51}{90} + \frac{14}{90} = \frac{65}{90} = \frac{65:5}{90:5} = \frac{13}{18}$$

$$5. \frac{19}{30} + \frac{4}{12} = \frac{19 \cdot 2}{30 \cdot 2} + \frac{4 \cdot 5}{12 \cdot 5} = \frac{38}{60} + \frac{20}{60} = \frac{58}{60} = \frac{58:2}{60:2} = \frac{29}{30}$$

$$6. \frac{3}{14} + \frac{7}{42} = \frac{3 \cdot 3}{14 \cdot 3} + \frac{7}{42} = \frac{9}{42} + \frac{7}{42} = \frac{16}{42} = \frac{8}{21}$$

$$7. \frac{3}{8} + \frac{2}{7} = \frac{3 \cdot 7}{8 \cdot 7} + \frac{2 \cdot 8}{7 \cdot 8} = \frac{21}{56} + \frac{16}{56} = \frac{37}{56}$$

$$8. \frac{3}{24} + \frac{4}{16} = \frac{3:3}{24:3} + \frac{4:2}{16:2} = \frac{1}{8} + \frac{2}{8} = \frac{3}{8}$$

$$9. \frac{2}{5} + \frac{4}{21} = \frac{2 \cdot 21}{5 \cdot 21} + \frac{4 \cdot 5}{21 \cdot 5} = \frac{42}{105} + \frac{20}{105} = \frac{62}{105}$$

$$10. \frac{1}{99} + \frac{1}{5} = \frac{1 \cdot 5}{99 \cdot 5} + \frac{1 \cdot 99}{5 \cdot 99} = \frac{5}{495} + \frac{99}{495} = \frac{104}{495}$$

$$11. \frac{3}{7} + \frac{1}{5} + \frac{2}{14} = \frac{3}{7} + \frac{1}{5} + \frac{2:2}{14:2} = \frac{3}{7} + \frac{1}{5} + \frac{1}{7} = \frac{4}{7} + \frac{1}{5} = \frac{4 \cdot 5}{7 \cdot 5} + \frac{1 \cdot 7}{5 \cdot 7} = \frac{20}{35} + \frac{7}{35} = \frac{27}{35}$$

$$12. \frac{1}{3} + \frac{1}{7} + \frac{1}{2} = \frac{1 \cdot 7}{3 \cdot 7} + \frac{1 \cdot 3}{7 \cdot 3} + \frac{1}{2} = \frac{7}{21} + \frac{3}{21} + \frac{1}{2} = \frac{10}{21} + \frac{1}{2} = \frac{10 \cdot 2}{21 \cdot 2} + \frac{1 \cdot 21}{2 \cdot 21} = \frac{20}{42} + \frac{21}{42} = \frac{41}{42}$$

$$13. \frac{2}{9} + \frac{2}{3} + \frac{1}{15} = \frac{2 \cdot 5}{9 \cdot 5} + \frac{2 \cdot 15}{3 \cdot 15} + \frac{1 \cdot 3}{15 \cdot 3} = \frac{10}{45} + \frac{30}{45} + \frac{3}{45} = \frac{43}{45}$$

$$14. \frac{3}{14} + \frac{40}{84} + \frac{39}{126} = \frac{3 \cdot 18}{14 \cdot 18} + \frac{40 \cdot 3}{84 \cdot 3} + \frac{39 \cdot 2}{126 \cdot 2} = \frac{54}{252} + \frac{120}{252} + \frac{78}{252} = 1$$

$$15. \frac{4}{26} + \frac{3}{18} + \frac{12}{26} = \frac{16}{26} + \frac{3}{18} = \frac{16 \cdot 18}{26 \cdot 18} + \frac{3 \cdot 26}{18 \cdot 26} = \frac{288}{468} + \frac{78}{468} = \frac{366}{468} = \frac{366:2}{468:2} = \frac{183:3}{234:3} = \frac{61}{78}$$