

Bruchrechnen - Aufgabensammlung



Hier findest du einige Rechenaufgaben die dir helfen zu überprüfen ob du das Thema Bruchrechnen beherrschst. Auf unserer Webseite [Rahal-Teaching.ch](https://www.rahall-teaching.ch) findest du die Lösungen und einige vorgerechnete Beispiele. Viel Spass beim lösen!

Rechne aus und kürze wo möglich:

$$1. \quad \frac{2}{6} + \frac{2}{6} = \frac{2+2}{6} = \frac{4}{6} = \frac{2}{3}$$

$$2. \quad \frac{2}{3} + \frac{1}{3} = \frac{3}{3} = 1$$

$$3. \quad \frac{3}{4} - \frac{1}{4} = \frac{3-1}{4} = \frac{2}{4} = \frac{1}{2}$$

$$4. \quad \frac{1}{3} + \frac{1}{6} = \frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$

$$5. \quad \frac{1}{2} + \frac{1}{6} = \frac{3}{6} + \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$$

$$6. \quad \frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

$$7. \quad \frac{4}{6} - \frac{1}{3} = \frac{2}{3} - \frac{1}{3} = \frac{1}{3}$$

$$8. \quad \frac{5}{7} - \frac{1}{2} = \frac{10}{14} - \frac{7}{14} = \frac{3}{14}$$

$$9. \quad \frac{3}{8} - \frac{5}{6} = \frac{9}{24} - \frac{20}{24} = -\frac{11}{24}$$

$$10. \quad 1 + \frac{1}{3} = \frac{3}{3} + \frac{1}{3} = \frac{4}{3} = 1\frac{1}{3}$$

$$11. \quad 1\frac{2}{3} + \frac{1}{3} = \frac{3}{3} + \frac{2}{3} + \frac{1}{3} = \frac{6}{3} = 2$$

$$12. \quad 1\frac{2}{3} - \frac{1}{3} = 1 + \frac{2}{3} - \frac{1}{3} = 1\frac{1}{3}$$

$$13. \quad 1\frac{2}{3} - 1 = \frac{5}{3} - \frac{3}{3} = \frac{2}{3}$$

$$14. \quad 2\frac{2}{3} + 1\frac{1}{3} = \frac{8}{3} + \frac{4}{3} = \frac{12}{3} = 4$$

$$15. \quad \frac{4}{3} + \frac{2}{3} = \frac{6}{3} = 2$$

$$16. \quad \frac{1}{3} \times \frac{4}{3} = \frac{1 \times 4}{3 \times 3} = \frac{4}{9}$$

$$17. \quad \frac{3}{3} \times \frac{2}{3} = \frac{3 \times 2}{3 \times 3} = \frac{6}{9} = \frac{2}{3}$$

$$18. \quad \frac{3}{9} \times \frac{12}{24} = \frac{1}{3} \times \frac{1}{2} = \frac{1 \times 1}{3 \times 2} = \frac{1}{6}$$

$$19. \quad 2 \times \frac{1}{3} = \frac{4}{2} \times \frac{1}{3} = \frac{4}{6} = \frac{2}{3}$$

$$20. \quad \frac{2}{3} \times 3 = \frac{2}{3} \times \frac{3}{1} = \frac{6}{3} = 2$$

$$21. \quad 2\frac{2}{3} \times \frac{1}{3} = \frac{8}{3} \times \frac{1}{3} = \frac{8}{9}$$

$$22. \quad 1\frac{2}{3} \times 2\frac{2}{5} = \frac{5}{3} \times \frac{12}{5} = \frac{60}{15} = 4$$

$$23. \quad \frac{2}{3} \div \frac{1}{3} = \frac{2}{3} \times \frac{3}{1} = \frac{6}{3} = 2$$

$$24. \quad \frac{2}{5} \div \frac{1}{3} = \frac{2}{5} \times \frac{3}{1} = \frac{6}{5} = 1\frac{1}{5}$$

$$25. \quad \frac{1}{3} \div \frac{2}{3} = \frac{1}{3} \times \frac{3}{2} = \frac{3}{6} = \frac{1}{2}$$

$$26. \quad 1 \div \frac{7}{5} = \frac{1}{1} \div \frac{7}{5} = \frac{1}{1} \times \frac{5}{7} = \frac{5}{7}$$

$$27. \quad 2 \div \frac{1}{3} = \frac{2}{1} \times \frac{3}{1} = 6$$

$$28. \quad 1 \div 7 = \frac{1}{1} \div \frac{7}{1} = \frac{1}{1} \times \frac{1}{7} = \frac{1}{7}$$

$$29. \quad 1\frac{2}{3} \div \frac{2}{5} = \frac{5}{3} \times \frac{5}{2} = \frac{25}{6} = 4\frac{1}{6}$$

$$30. \quad \frac{2}{3} \div 2\frac{2}{5} = \frac{2}{3} \div \frac{12}{5} = \frac{2}{3} \times \frac{5}{12} = \frac{10}{36} = \frac{5}{18}$$

Mit Algebra:

$$31. \quad \frac{2x}{3} + \frac{1}{3} = \frac{2x+1}{3}$$

$$32. \quad \frac{1}{x} + \frac{2}{5} = \frac{5}{5x} + \frac{2x}{5x} = \frac{2x+5}{5x}$$

$$33. \quad \frac{2}{3} - \frac{2x}{5} = \frac{10}{15} - \frac{6x}{15} = \frac{10-6x}{15}$$

$$34. \quad x + \frac{2}{5} = \frac{x}{1} + \frac{2}{5} = \frac{5x}{5} + \frac{2}{5} = \frac{5x+2}{5}$$

$$35. \quad \frac{2x}{3} \times \frac{1}{4} = \frac{2x}{12} = \frac{x}{6}$$

$$36. \quad \frac{3}{5} \div \frac{x}{3} = \frac{3}{5} \times \frac{3}{x} = \frac{9}{5x}$$