

# Mathematikaufgaben

## > Algebra

### > Bruchrechnung

---

**Aufgabe:** Kürze den Bruch

a)  $\frac{12}{8} = ?$

b)  $\frac{9}{12} = ?$

c)  $\frac{25}{20} = ?$

d)  $\frac{34}{18} = ?$

e)  $\frac{36}{28} = ?$

f)  $\frac{17}{51} = ?$

g)  $\frac{50}{30} = ?$

h)  $\frac{13}{104} = ?$

i)  $\frac{76}{80} = ?$

j)  $\frac{24}{16} = ?$

k)  $\frac{66}{42} = ?$

l)  $\frac{100}{35} = ?$

m)  $\frac{117}{72} = ?$

n)  $\frac{132}{22} = ?$

o)  $\frac{91}{56} = ?$

p)  $\frac{45}{110} = ?$

q)  $\frac{136}{51} = ?$

r)  $\frac{96}{150} = ?$

s)  $\frac{144}{228} = ?$

t)  $\frac{27}{12} = ?$

**Lösungen:** Brüche werden gekürzt, indem Zähler und Nenner durch dieselbe (natürliche) Zahl geteilt werden. Es ergibt sich daraus:

$$\text{a) } \frac{12}{8} = \frac{12:4}{8:4} = \frac{3}{2}$$

$$\text{b) } \frac{9}{12} = \frac{9:3}{12:3} = \frac{3}{4}$$

$$\text{c) } \frac{25}{20} = \frac{25:5}{20:5} = \frac{5}{4}$$

$$\text{d) } \frac{34}{18} = \frac{34:2}{18:2} = \frac{17}{9}$$

$$\text{e) } \frac{36}{28} = \frac{36:4}{28:4} = \frac{9}{7}$$

$$\text{f) } \frac{17}{51} = \frac{17:17}{51:17} = \frac{1}{3}$$

$$\text{g) } \frac{50}{30} = \frac{50:10}{30:10} = \frac{5}{3}$$

$$\text{h) } \frac{13}{104} = \frac{13:13}{104:13} = \frac{1}{8}$$

$$\text{i) } \frac{76}{80} = \frac{76:4}{80:4} = \frac{19}{20}$$

$$\text{j) } \frac{24}{16} = \frac{24:8}{16:8} = \frac{3}{2}$$

$$\text{k) } \frac{66}{42} = \frac{66:6}{42:6} = \frac{11}{7}$$

$$\text{l) } \frac{100}{35} = \frac{100:5}{35:5} = \frac{20}{7}$$

$$\text{m) } \frac{117}{72} = \frac{117:9}{72:9} = \frac{13}{8}$$

$$\text{n) } \frac{132}{22} = \frac{132:22}{22:22} = \frac{6}{1} = 6$$

$$\text{o) } \frac{91}{56} = \frac{91:7}{56:7} = \frac{13}{8}$$

$$\text{p) } \frac{45}{110} = \frac{45:5}{110:5} = \frac{9}{22}$$

$$\text{q) } \frac{136}{51} = \frac{136:17}{51:17} = \frac{8}{3}$$

$$\text{r) } \frac{96}{150} = \frac{96:6}{150:6} = \frac{16}{25}$$

$$\text{s) } \frac{144}{228} = \frac{144:12}{228:12} = \frac{12}{19}$$

$$\text{t) } \frac{27}{12} = \frac{27:3}{12:3} = \frac{9}{4}$$