

Breuken vermenigvuldigen

Vermenigvuldigen Bij vermenigvuldigen teller maal teller en noemer maal noemer:

$$\frac{2}{3} \cdot \frac{1}{4} = \frac{2 \cdot 1}{3 \cdot 4} = \frac{2}{12} = \frac{1}{6}$$

Wegstrepen Vaak kan je meteen getallen in teller en noemer tegen elkaar wegstrepen, dan hoef je niet zo veel te rekenen:

$$\frac{3}{8} \cdot \frac{4}{5} = \frac{3}{\cancel{8}^2} \cdot \frac{4^1}{5} = \frac{3 \cdot 1}{2 \cdot 5} = \frac{3}{5}$$

Schrijfwijze Breuken meer dan 1 reken je eerst om in een echte breuk voordat je verder rekt:

$$2\frac{1}{3} \cdot 1\frac{4}{5} = \frac{7}{3} \cdot \frac{9}{5} = \frac{21}{5}$$

1. a. $2 \times \frac{1}{7} =$
b. $3 \times 2\frac{1}{7} =$
c. $3 \times 1\frac{1}{3} =$
d. $6 \times \frac{5}{11} =$
e. $6 \times \frac{5}{12} =$
f. $4 \times 2\frac{3}{8} =$
g. $4 \times 2\frac{3}{7} =$
h. $7 \times \frac{3}{7} =$
i. $7 \times 1\frac{5}{14} =$
2. a. $\frac{3}{7} \times 14 =$
b. $\frac{2}{9} \times 6 =$
c. $\frac{2}{9} \times 7 =$
d. $1\frac{1}{3} \times 4 =$
e. $2\frac{1}{3} \times 3 =$
f. $5\frac{1}{2} \times 4 =$
g. $1\frac{5}{7} \times 28 =$
h. $1\frac{5}{7} \times 27 =$
i. $0 \times 2\frac{1}{2} =$
3. a. $\frac{2}{3} \times \frac{1}{5} =$
b. $\frac{2}{3} \times \frac{4}{9} =$
c. $\frac{2}{3} \times \frac{3}{7} =$
d. $\frac{3}{8} \times \frac{2}{3} =$
e. $\frac{5}{9} \times \frac{9}{25} =$
f. $\frac{1}{2} \times \frac{1}{2} =$
g. $\frac{7}{11} \times \frac{11}{21} =$
h. $\frac{7}{11} \times \frac{13}{21} =$
i. $\frac{7}{11} \times \frac{13}{23} =$
4. a. $1\frac{1}{2} \times 1\frac{1}{2} =$
b. $1\frac{1}{3} \times 1\frac{1}{3} =$
c. $1\frac{2}{3} \times 2\frac{1}{5} =$
d. $1\frac{2}{3} \times 2\frac{2}{5} =$
e. $3\frac{1}{4} \times 1\frac{1}{13} =$
f. $1\frac{7}{13} \times 3\frac{1}{4} =$
g. $1\frac{1}{6} \times 2\frac{1}{6} =$
h. $1\frac{1}{3} \times 2\frac{5}{8} =$
i. $\frac{1}{12} \times \frac{1}{2} =$
5. Eerst wegstrepen!
a. $\frac{1}{2} \times \frac{2}{3} =$
b. $\frac{2}{3} \times \frac{3}{4} =$
c. $\frac{3}{4} \times \frac{4}{5} =$
d. $\frac{5}{6} \times \frac{6}{7} =$
e. $\frac{7}{8} \times \frac{8}{9} =$
f. $\frac{8}{9} \times \frac{9}{10} =$
g. $\frac{4}{3} \times \frac{3}{4} =$
h. $\frac{7}{11} \times \frac{22}{7} =$
i. $\frac{5}{8} \times \frac{24}{5} =$
6. a. $\frac{6}{7} \times \frac{14}{3} =$
b. $\frac{2}{21} \times \frac{7}{6} =$
c. $\frac{12}{11} \times \frac{33}{4} =$
d. $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} =$
e. $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} =$
f. $\frac{4}{5} \times \frac{5}{6} \times \frac{6}{7} =$
g. $\frac{6}{7} \times \frac{7}{8} \times \frac{8}{9} \times \frac{9}{10} =$
h. $\frac{7}{8} \times \frac{8}{9} \times \frac{9}{10} \times \frac{10}{11} =$
i. $\frac{11}{12} \times \frac{8}{9} \times \frac{10}{11} \times \frac{9}{10} =$

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7. a. $3 \times \frac{1}{3} =$
 b. $\frac{1}{7} \times 7 =$
 c. $4 \times \frac{1}{2} =$
 d. $\frac{1}{24} \times 7 =$
 e. $5 \times \frac{1}{2} =$
 f. $\frac{1}{80} \times 7 =$
 g. $2 \times \frac{3}{8} =$
 h. $\frac{3}{26} \times 2 =$
 i. $3 \times \frac{4}{63} =$
 j. $\frac{11}{96} \times 3 =$
 k. $4 \times \frac{37}{144} =$
 l. $\frac{60}{230} \times 4 =$

8. a. $\frac{3 \cdot 7 \cdot 24 \cdot 5 \cdot 60}{5 \cdot 4 \cdot 21 \cdot 36 \cdot 10} =$
 b. $\frac{28 \cdot 26 \cdot 12 \cdot 4 \cdot 2}{13 \cdot 7 \cdot 8 \cdot 2 \cdot 96} =$
 c. $\frac{324 \cdot 13 \cdot 12 \cdot 19 \cdot 2}{3 \cdot 156 \cdot 38 \cdot 9 \cdot 36} =$
 d. $\frac{750 \cdot 44 \cdot 17 \cdot 17 \cdot 10}{11 \cdot 34 \cdot 425 \cdot 75 \cdot 2} =$
 e. $\frac{1}{2} \cdot \frac{8}{7} \cdot \frac{7}{2} \cdot \frac{3}{5} \cdot \frac{25}{15} =$
 f. $\frac{8}{3} \cdot \frac{32}{9} \cdot \frac{27}{16} \cdot \frac{17}{4} \cdot \frac{2}{34} =$
 g. $\frac{99}{15} \cdot \frac{32}{12} \cdot \frac{3}{11} \cdot \frac{4}{8} \cdot \frac{10}{4} =$
 h. $\frac{24}{327} \cdot \frac{19}{8} \cdot \frac{109}{171} \cdot \frac{45}{4} \cdot \frac{24}{48} =$

Oplossingen

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|----------------------|----------------------|-------------------|--------------------|
| 1. a. $\frac{2}{7}$ | b. $\frac{8}{27}$ | c. $\frac{3}{5}$ | d. $\frac{1}{4}$ |
| b. $6\frac{3}{7}$ | c. $\frac{2}{7}$ | d. $\frac{5}{7}$ | e. $\frac{1}{8}$ |
| c. 7 | d. $\frac{1}{4}$ | e. $\frac{7}{9}$ | f. $\frac{1}{16}$ |
| d. $2\frac{8}{11}$ | e. $\frac{1}{5}$ | f. $\frac{4}{5}$ | g. $\frac{4}{4}$ |
| e. $2\frac{1}{2}$ | f. $\frac{1}{4}$ | g. 1 | h. $\frac{3}{13}$ |
| f. $9\frac{1}{2}$ | g. $\frac{1}{3}$ | h. 2 | i. $\frac{4}{21}$ |
| g. $9\frac{5}{7}$ | h. $\frac{13}{33}$ | i. 3 | j. $\frac{11}{32}$ |
| h. 3 | i. $\frac{91}{253}$ | 6. a. 4 | k. $1\frac{1}{36}$ |
| i. $9\frac{1}{2}$ | 4. a. $2\frac{1}{4}$ | b. $\frac{1}{9}$ | l. $1\frac{1}{23}$ |
| 2. a. 6 | b. $1\frac{7}{9}$ | c. 9 | 8. a. 1 |
| b. $1\frac{1}{3}$ | c. $3\frac{2}{3}$ | d. $\frac{1}{4}$ | b. $\frac{1}{2}$ |
| c. $1\frac{5}{9}$ | d. 4 | e. $\frac{2}{5}$ | c. $\frac{4}{9}$ |
| d. $9\frac{1}{3}$ | e. $3\frac{1}{2}$ | f. $\frac{4}{7}$ | d. 4 |
| e. 7 | f. 5 | g. $\frac{3}{5}$ | e. 2 |
| f. 22 | g. $2\frac{19}{36}$ | h. $\frac{7}{11}$ | f. 4 |
| g. 48 | h. $3\frac{1}{2}$ | i. $\frac{2}{3}$ | g. 6 |
| h. $49\frac{1}{7}$ | i. $\frac{1}{24}$ | 7. a. 1 | h. $\frac{5}{8}$ |
| i. 0 | 5. a. $\frac{1}{3}$ | b. 1 | |
| 3. a. $\frac{2}{15}$ | b. $\frac{1}{2}$ | c. 2 | |