

# Breuken 7

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$\frac{1}{5}$

$\frac{3}{4}$

$\frac{2}{8}$

 Kinheim

De volgende breuk is zevenden.  
Deze breuk kun je niet vereenvoudigen.  
Een makkelijke breuk dus.



zevenden

$$\frac{1}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{2}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{1}{7} - \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{2}{7} - \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{2}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{1}{7} + \frac{4}{7} = \underline{\hspace{2cm}} \quad \frac{2}{7} - \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{1}{7} - \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{3}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{2}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{1}{7} - \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{4}{7} - \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{4}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{4}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{4}{7} - \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{6}{7} - \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{3}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{1}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{6}{7} - \frac{2}{7} = \underline{\hspace{2cm}} \quad \frac{4}{7} - \frac{2}{7} = \underline{\hspace{2cm}}$$

$$\frac{4}{7} + \frac{5}{7} = \underline{\hspace{2cm}} \quad \frac{12}{7} - \frac{9}{7} = \underline{\hspace{2cm}} \quad \frac{2}{7} + \frac{9}{7} = \underline{\hspace{2cm}} \quad \frac{15}{7} - \frac{8}{7} = \underline{\hspace{2cm}}$$

$$\frac{2}{7} + \frac{8}{7} = \underline{\hspace{2cm}} \quad \frac{8}{7} - \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{9}{7} + \frac{8}{7} = \underline{\hspace{2cm}} \quad \frac{12}{7} - \frac{6}{7} = \underline{\hspace{2cm}}$$

$$\frac{1}{7} + \frac{6}{7} = \underline{\hspace{2cm}} \quad \frac{11}{7} - \frac{3}{7} = \underline{\hspace{2cm}} \quad \frac{9}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad \frac{10}{7} - \frac{9}{7} = \underline{\hspace{2cm}}$$

$$\frac{4}{7} + \frac{6}{7} = \underline{\hspace{2cm}} \quad \frac{13}{7} - \frac{6}{7} = \underline{\hspace{2cm}} \quad \frac{6}{7} + \frac{8}{7} = \underline{\hspace{2cm}} \quad \frac{13}{7} - \frac{11}{7} = \underline{\hspace{2cm}}$$

$$\frac{5}{7} + \frac{6}{7} = \underline{\hspace{2cm}} \quad \frac{10}{7} - \frac{4}{7} = \underline{\hspace{2cm}} \quad \frac{4}{7} + \frac{9}{7} = \underline{\hspace{2cm}} \quad \frac{11}{7} - \frac{9}{7} = \underline{\hspace{2cm}}$$

$$3 \frac{1}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad 7 \frac{1}{7} + \frac{5}{7} = \underline{\hspace{2cm}} \quad 5 \frac{2}{7} + \frac{6}{7} = \underline{\hspace{2cm}} \quad 3 \frac{4}{7} + \frac{6}{7} = \underline{\hspace{2cm}}$$

$$5 \frac{2}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad 8 \frac{3}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad 3 \frac{1}{7} + \frac{9}{7} = \underline{\hspace{2cm}} \quad 2 \frac{5}{7} + \frac{8}{7} = \underline{\hspace{2cm}}$$

$$2 \frac{2}{7} + \frac{3}{7} = \underline{\hspace{2cm}} \quad 4 \frac{1}{7} + \frac{2}{7} = \underline{\hspace{2cm}} \quad 6 \frac{0}{7} + \frac{1}{7} = \underline{\hspace{2cm}} \quad 8 \frac{2}{7} + \frac{5}{7} = \underline{\hspace{2cm}}$$

Welk deel van de figuur is grijs?



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



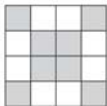
\_\_\_\_\_ deel is grijs



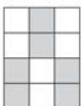
\_\_\_\_\_ deel is grijs



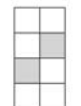
\_\_\_\_\_ deel is grijs



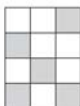
\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs



\_\_\_\_\_ deel is grijs

$7 - \frac{2}{10} = \underline{\hspace{2cm}}$

$6\frac{1}{10} - \frac{9}{10} = \underline{\hspace{2cm}}$

$3\frac{6}{10} - 1\frac{2}{10} = \underline{\hspace{2cm}}$

$2\frac{2}{10} - 1\frac{5}{10} = \underline{\hspace{2cm}}$

$5 - \frac{1}{10} = \underline{\hspace{2cm}}$

$4\frac{3}{10} - \frac{8}{10} = \underline{\hspace{2cm}}$

$8\frac{4}{10} - 4\frac{1}{10} = \underline{\hspace{2cm}}$

$7\frac{3}{10} - 4\frac{8}{10} = \underline{\hspace{2cm}}$

$3 - \frac{6}{10} = \underline{\hspace{2cm}}$

$8\frac{7}{10} - \frac{3}{10} = \underline{\hspace{2cm}}$

$4\frac{8}{10} - 2\frac{5}{10} = \underline{\hspace{2cm}}$

$9\frac{5}{10} - 6\frac{7}{10} = \underline{\hspace{2cm}}$

$2 - \frac{5}{10} = \underline{\hspace{2cm}}$

$5\frac{2}{10} - \frac{7}{10} = \underline{\hspace{2cm}}$

$6\frac{8}{10} - 5\frac{6}{10} = \underline{\hspace{2cm}}$

$4\frac{1}{10} - 3\frac{8}{10} = \underline{\hspace{2cm}}$

$4 - \frac{4}{10} = \underline{\hspace{2cm}}$

$3\frac{5}{10} - \frac{3}{10} = \underline{\hspace{2cm}}$

$5\frac{7}{10} - 3\frac{2}{10} = \underline{\hspace{2cm}}$

$3\frac{4}{10} - 2\frac{6}{10} = \underline{\hspace{2cm}}$

$3 \times \frac{1}{10} = \underline{\hspace{2cm}}$

$8 \times \frac{6}{10} = \underline{\hspace{2cm}}$

$2 \times 4\frac{3}{10} = \underline{\hspace{2cm}}$

$5 \times 6\frac{3}{10} = \underline{\hspace{2cm}}$

$4 \times \frac{3}{10} = \underline{\hspace{2cm}}$

$3 \times \frac{4}{10} = \underline{\hspace{2cm}}$

$8 \times 3\frac{2}{10} = \underline{\hspace{2cm}}$

$6 \times 3\frac{2}{10} = \underline{\hspace{2cm}}$

$6 \times \frac{5}{10} = \underline{\hspace{2cm}}$

$7 \times \frac{3}{10} = \underline{\hspace{2cm}}$

$6 \times 2\frac{4}{10} = \underline{\hspace{2cm}}$

$8 \times 4\frac{3}{10} = \underline{\hspace{2cm}}$

$5 \times \frac{2}{10} = \underline{\hspace{2cm}}$

$4 \times \frac{8}{10} = \underline{\hspace{2cm}}$

$3 \times 5\frac{5}{10} = \underline{\hspace{2cm}}$

$4 \times 6\frac{5}{10} = \underline{\hspace{2cm}}$

$2 \times \frac{7}{10} = \underline{\hspace{2cm}}$

$5 \times \frac{5}{10} = \underline{\hspace{2cm}}$

$4 \times 3\frac{6}{10} = \underline{\hspace{2cm}}$

$7 \times 2\frac{4}{10} = \underline{\hspace{2cm}}$

$4\frac{2}{10} : 7 = \underline{\hspace{2cm}}$

$1\frac{2}{10} : 3 = \underline{\hspace{2cm}}$

$3\frac{5}{10} : 7 = \underline{\hspace{2cm}}$

$4\frac{5}{10} : 5 = \underline{\hspace{2cm}}$

$2\frac{1}{10} : 7 = \underline{\hspace{2cm}}$

$3\frac{2}{10} : 8 = \underline{\hspace{2cm}}$

$5\frac{6}{10} : 7 = \underline{\hspace{2cm}}$

$5\frac{4}{10} : 6 = \underline{\hspace{2cm}}$

$6\frac{4}{10} : 8 = \underline{\hspace{2cm}}$

$6\frac{6}{10} : 11 = \underline{\hspace{2cm}}$

$4\frac{8}{10} : 8 = \underline{\hspace{2cm}}$

$7\frac{2}{10} : 8 = \underline{\hspace{2cm}}$

$8\frac{1}{10} : 9 = \underline{\hspace{2cm}}$

$2\frac{4}{10} : 6 = \underline{\hspace{2cm}}$

$4\frac{5}{10} : 9 = \underline{\hspace{2cm}}$

$3\frac{6}{10} : 4 = \underline{\hspace{2cm}}$

$5\frac{6}{10} : 8 = \underline{\hspace{2cm}}$

$7\frac{2}{10} : 9 = \underline{\hspace{2cm}}$

$2\frac{5}{10} : 5 = \underline{\hspace{2cm}}$

$1\frac{5}{10} : 5 = \underline{\hspace{2cm}}$

Er zijn ook breuken met verschillende noemers, waarvan je denkt: Die kan ik niet optellen of aftrekken. Toch is dat wel mogelijk.

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

Hoe doen we dat?

Kijk goed naar de figuur.

$$\frac{2}{3} = \frac{4}{6} \text{ (dat wist je al)}$$



$$\frac{1}{2} = \frac{3}{6} \text{ (dat wist je ook)}$$



Ik kan dus  $\frac{2}{3} + \frac{1}{2}$  ook opschrijven als  $\frac{4}{6} + \frac{3}{6} = \frac{7}{6} = 1\frac{1}{6}$   
 Ik zet de som nog eens achter elkaar:  $\frac{2}{3} + \frac{1}{2} = \frac{4}{6} + \frac{3}{6} = \frac{7}{6} = 1\frac{1}{6}$

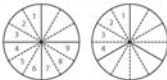
De 6 komt in de tafel van 2 en van 3 voor. Daarom kan ik van de 2 en de 3 een 6 maken.

De een vermenigvuldig ik met 3 en de ander met 2, maar.....

**Als ik de noemers vermenigvuldig moet ik de tellers met hetzelfde getal vermenigvuldigen, anders krijg ik een andere breuk.**

$$\frac{3}{4} + \frac{1}{3} =$$

12 komt in de tafel van 3 en van 4 voor. Daarom verander ik de noemers in 12



$$\frac{3}{4} + \frac{1}{3} = \frac{9}{12} + \frac{4}{12} = \frac{13}{12} = 1\frac{1}{12}$$

Noemers gelijk maken hoeft alleen maar bij optellen en aftrekken.