

MATHE 364

13.05. rückwärts rechnen

Aufgabe	rückwärts gerechnet	Lösung
$\frac{3}{8} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{3}{8} = \frac{7}{8} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{4}{8}$
$\frac{1}{8} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{8} = \frac{7}{8} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{8}$
$\frac{1}{9} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{9} = \frac{8}{72} = \frac{7}{8} - \frac{\square}{\square} = \frac{63}{72} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{72}$
$\frac{7}{16} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{7}{16} = \frac{7}{8} - \frac{\square}{\square} = \frac{14}{16} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{16}$
$\frac{\square}{\square} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{\square}{\square} = \frac{7}{8} - \frac{\square}{\square}$	also: $\frac{\square}{\square} + \frac{\square}{\square} = \frac{7}{8}$
$\frac{9}{8} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{9}{8} = \frac{7}{8} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{8}$
$\frac{15}{16} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{15}{16} = \frac{7}{8} + \frac{\square}{\square} = \frac{14}{16} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{16}$
$\frac{39}{40} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{39}{40} = \frac{7}{8} + \frac{\square}{\square} = \frac{35}{40} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{\square}{40}$
$\frac{1}{10} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{10} = \frac{4}{40} = \frac{7}{8} + \frac{\square}{\square} = \frac{35}{40} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = -\frac{\square}{40}$
$\frac{\square}{\square} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{\square}{\square} = \frac{7}{8} + \frac{\square}{\square}$	also: $\frac{\square}{\square} - \frac{\square}{\square} = \frac{7}{8}$
$\frac{1}{2} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{1}{2} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{\square}{\square}$
$\frac{3}{4} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{3}{4} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{\square}{\square}$
$\frac{3}{8} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{3}{8} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{\square}{\square}$
$\frac{7}{4} : \frac{x}{y} = \frac{7}{8}$	$\frac{7}{4} = \frac{7}{8} \cdot \frac{x}{y}$	also: $\frac{x}{y} = \frac{\square}{\square}$
$\frac{7}{16} : \frac{x}{y} = \frac{7}{8}$	$\frac{7}{16} = \frac{7}{8} \cdot \frac{x}{y}$	also: $\frac{x}{y} = \frac{\square}{\square}$

Bestimme mindestens ...

- a) ...dreimal für Strichrechnung (+ oder -) einen passenden Bruch $\frac{\square}{\square}$.
- b) ... zweimal für Punktrechnung (• oder :) einen passenden Bruch $\frac{x}{y}$.

Aufgabe	rückwärts gerechnet	Lösung
$\frac{3}{8} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{3}{8} = \frac{7}{8} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{4}{8}$
$\frac{1}{8} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{8} = \frac{7}{8} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{6}{8}$
$\frac{1}{9} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{9} = \frac{8}{72} = \frac{7}{8} - \frac{\square}{\square} = \frac{63}{72} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{55}{72}$
$\frac{7}{16} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{7}{16} = \frac{7}{8} - \frac{\square}{\square} = \frac{14}{16} - \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{7}{16}$
$\frac{\square}{\square} + \frac{\square}{\square} = \frac{7}{8}$	$\frac{\square}{\square} = \frac{7}{8} - \frac{\square}{\square}$	z. B. $\frac{1}{4} + \frac{5}{8} = \frac{7}{8}$
$\frac{9}{8} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{9}{8} = \frac{7}{8} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{2}{8} = \frac{1}{4}$
$\frac{15}{16} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{15}{16} = \frac{7}{8} + \frac{\square}{\square} = \frac{14}{16} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{1}{16}$
$\frac{39}{40} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{39}{40} = \frac{7}{8} + \frac{\square}{\square} = \frac{35}{40} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{4}{40} = \frac{1}{10}$
$\frac{1}{10} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{1}{10} = \frac{4}{40} = \frac{7}{8} + \frac{\square}{\square} = \frac{35}{40} + \frac{\square}{\square}$	also: $\frac{\square}{\square} = \frac{-31}{40}$
$\frac{\square}{\square} - \frac{\square}{\square} = \frac{7}{8}$	$\frac{\square}{\square} = \frac{7}{8} + \frac{\square}{\square}$	z. B. $\frac{8}{8} - \frac{1}{8} = \frac{7}{8}$
$\frac{1}{2} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{1}{2} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{7}{4}$
$\frac{3}{4} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{3}{4} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{7}{6}$
$\frac{3}{8} \cdot \frac{x}{y} = \frac{7}{8}$	$\frac{3}{8} = \frac{7}{8} : \frac{x}{y} = \frac{7}{8} \cdot \frac{y}{x}$	also: $\frac{x}{y} = \frac{7}{3}$
$\frac{7}{4} : \frac{x}{y} = \frac{7}{8}$	$\frac{7}{4} = \frac{7}{8} \cdot \frac{x}{y}$	also: $\frac{x}{y} = \frac{2}{1}$
$\frac{7}{16} : \frac{x}{y} = \frac{7}{8}$	$\frac{7}{16} = \frac{7}{8} \cdot \frac{x}{y}$	also: $\frac{x}{y} = \frac{1}{2}$

Bestimme mindestens ...

- a)** ...dreimal für Strichrechnung (+ oder -) einen passenden Bruch $\frac{\square}{\square}$. **s.o.**
b) ... zweimal für Punktrechnung (· oder :) einen passenden Bruch $\frac{x}{y}$. **s.o.**

Zusatzaufgabe: Überprüfe deine Lösungen mit dem Taschenrechner.