

Bruchrechnung

Aufgabe 1: Brüche multiplizieren

$$a) \frac{8}{2} \cdot \frac{2}{4} =$$

$$b) \frac{7}{8} \cdot \frac{5}{6} =$$

$$c) \frac{5}{4} \cdot \frac{6}{2} =$$

$$d) \frac{8}{7} \cdot \frac{4}{7} =$$

$$e) \frac{7}{6} \cdot \frac{3}{8} =$$

$$f) \frac{6}{9} \cdot \frac{5}{8} =$$

Aufgabe 2: Brüche dividieren

$$a) \frac{7}{8} : \frac{4}{9} =$$

$$b) \frac{7}{9} : \frac{4}{6} =$$

$$c) \frac{7}{6} : \frac{6}{2} =$$

$$d) \frac{9}{3} : \frac{7}{6} =$$

$$e) \frac{7}{8} : \frac{9}{7} =$$

$$f) \frac{8}{9} : \frac{8}{4} =$$

Aufgabe 3: Brüche addieren und subtrahieren

$$a) \frac{8}{3} - \frac{8}{5} =$$

$$b) \frac{8}{7} + \frac{6}{7} =$$

$$c) \frac{8}{9} + \frac{5}{7} =$$

$$d) \frac{3}{8} - \frac{7}{3} =$$

$$e) \frac{9}{3} + \frac{3}{2} =$$

$$f) \frac{2}{7} + \frac{9}{4} =$$

Aufgabe 4: Gemischte Aufgaben

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

$$b) \frac{7}{2} \cdot \frac{5}{4} =$$

$$c) \frac{4}{8} \cdot \frac{2}{5} =$$

$$d) \frac{2}{5} : \frac{9}{7} =$$

$$e) \frac{7}{9} + \frac{6}{3} =$$

$$f) \frac{9}{6} \cdot \frac{9}{6} =$$

Ein Erklärvideo zum Thema findest du unter dem folgenden Link.



Lösung:

Aufgabe 1: Brüche multiplizieren

a) $\frac{8}{2} \cdot \frac{2}{4} = \frac{16}{8} = \frac{2}{1}$

b) $\frac{7}{8} \cdot \frac{5}{6} = \frac{35}{48} = \underline{\hspace{2cm}}$

c) $\frac{5}{4} \cdot \frac{6}{2} = \frac{30}{8} = \frac{15}{4}$

d) $\frac{8}{7} \cdot \frac{4}{7} = \frac{32}{49} = \underline{\hspace{2cm}}$

e) $\frac{7}{6} \cdot \frac{3}{8} = \frac{21}{48} = \frac{7}{16}$

f) $\frac{6}{9} \cdot \frac{5}{8} = \frac{30}{72} = \frac{5}{12}$

Aufgabe 2: Brüche dividieren

a) $\frac{7}{8} \cdot \frac{4}{9} = \frac{7}{8} \cdot \frac{9}{4} = \frac{63}{32} \underline{\hspace{2cm}}$

b) $\frac{7}{9} \cdot \frac{4}{6} = \frac{7}{9} \cdot \frac{6}{4} = \frac{42}{36} = \frac{7}{6}$

c) $\frac{7}{6} \cdot \frac{6}{2} = \frac{7}{6} \cdot \frac{2}{6} = \frac{14}{36} = \frac{7}{18}$

d) $\frac{9}{3} \cdot \frac{7}{6} = \frac{9}{3} \cdot \frac{6}{7} = \frac{54}{21} = \frac{18}{7}$

e) $\frac{7}{8} \cdot \frac{9}{7} = \frac{7}{8} \cdot \frac{7}{9} = \frac{49}{72} \underline{\hspace{2cm}}$

f) $\frac{8}{9} \cdot \frac{8}{4} = \frac{8}{9} \cdot \frac{4}{8} = \frac{32}{72} = \frac{4}{9}$

Aufgabe 3: Brüche addieren und subtrahieren

a) $\frac{8}{3} - \frac{8}{5} = \frac{40}{15} - \frac{24}{15} = \frac{16}{15} \underline{\hspace{2cm}}$

b) $\frac{8}{7} + \frac{6}{7} = \frac{8}{7} + \frac{6}{7} = \frac{14}{7} = \frac{2}{1}$

c) $\frac{8}{9} + \frac{5}{7} = \frac{56}{63} + \frac{45}{63} = \frac{101}{63} \underline{\hspace{2cm}}$

d) $\frac{3}{8} - \frac{7}{3} = \frac{9}{24} - \frac{56}{24} = \frac{-47}{24} \underline{\hspace{2cm}}$

e) $\frac{9}{3} + \frac{3}{2} = \frac{18}{6} + \frac{9}{6} = \frac{27}{6} = \frac{9}{2}$

f) $\frac{2}{7} + \frac{9}{4} = \frac{8}{28} + \frac{63}{28} = \frac{71}{28} \underline{\hspace{2cm}}$

Aufgabe 4: Gemischte Aufgaben

a) $\frac{2}{8} : \frac{4}{3} = \frac{2}{8} \cdot \frac{3}{4} = \frac{6}{32} = \frac{3}{16}$

b) $\frac{7}{2} \cdot \frac{5}{4} = \frac{35}{8} = \underline{\hspace{2cm}} \underline{\hspace{2cm}} \underline{\hspace{2cm}}$

c) $\frac{4}{8} \cdot \frac{2}{5} = \frac{8}{40} = \frac{1}{5} \underline{\hspace{2cm}} \underline{\hspace{2cm}}$

i) $\frac{5}{8} : \frac{4}{7} = \frac{5}{8} \cdot \frac{7}{4} = \frac{35}{32} \underline{\hspace{2cm}}$

e) $\frac{7}{9} + \frac{6}{3} = \frac{7}{9} + \frac{18}{9} = \frac{25}{9} \underline{\hspace{2cm}}$

i) $\frac{5}{8} : \frac{4}{7} = \frac{5}{8} \cdot \frac{7}{4} = \frac{35}{32} \underline{\hspace{2cm}}$