

Mathematik-Wochenplan Nr. 10

15.06.2020 – 19.06.2020



Die ZOOM-Gruppen sind die Gruppen, in denen ihr auch im Unterricht arbeitet.

Die Meeting-ID und das Passwort habt ihr am 02. Juni von mir per Email erhalten.

Die Teilnahme am Online-Unterricht ist für alle Kinder verpflichtend!

Tag:	Aufgaben:	Erledigt:	Kontrolle:	Unterschrift Eltern:
Montag 15.06.2020	Kontrolle WP 7			
	Kontrolle WP 8			
Dienstag 16.06.2020	ZOOM-Konferenz: → Besprechung der Hausaufgaben (AB Nr. 1-7)			
	Gruppe 1: 9.00 Uhr			
	Gruppe 2: 10.00 Uhr			
	Gruppe 3: 11.00 Uhr			
	Kontrolle WP 9			
Mittwoch 17.06.2020	Buch S. 176 Nr. 5			
	Buch S. 177 Nr. 6			
Donnerstag 18.06.2020	Buch S. 177 Nr. 7			
	Buch S. 177 Nr. 8			
Freitag 19.06.2020	UNTERRICHT !!!			

Viel Erfolg beim Arbeiten und Lernen! Und bleibt gesund!!!
Eure Mathematiklehrerin Frau Größer

Für Rückfragen stehe ich euch gerne per Email groesser.bgs-ffm@gmx.de zur Verfügung!!!

Lösungen Wochenplan 7

S. 124 Nr. 4

a) $\frac{1}{4} + \frac{3}{8} = \frac{2}{8} + \frac{3}{8} = \frac{5}{8}$

Diagram showing the addition of $\frac{1}{4}$ and $\frac{3}{8}$. The first fraction $\frac{1}{4}$ is multiplied by $\frac{2}{2}$ to get $\frac{2}{8}$. The second fraction $\frac{3}{8}$ remains the same. The denominators are now both 8, and the numerators are added: $2 + 3 = 5$.

1. Schritt: gleichen Nenner suchen (kgV)

2. Schritt: Brüche erweitern

3. Schritt: Addieren oder subtrahieren (Zähler +/- Zähler)
Nenner bleibt gleich

4. Schritt: Kann ich kürzen? Kann ich in eine gemischte Zahl umwandeln?

$\frac{5}{6} - \frac{2}{3} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$

Diagram showing the subtraction of $\frac{2}{3}$ from $\frac{5}{6}$. The second fraction $\frac{2}{3}$ is multiplied by $\frac{2}{2}$ to get $\frac{4}{6}$. The denominators are now both 6, and the numerators are subtracted: $5 - 4 = 1$.

b) $\frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$

$\frac{11}{15} - \frac{2}{3} = \frac{11}{15} - \frac{10}{15} = \frac{1}{15}$

Diagram showing the addition of $\frac{2}{5}$ and $\frac{3}{10}$. The first fraction $\frac{2}{5}$ is multiplied by $\frac{2}{2}$ to get $\frac{4}{10}$. The second fraction $\frac{3}{10}$ remains the same. The denominators are now both 10, and the numerators are added: $4 + 3 = 7$.

Diagram showing the subtraction of $\frac{2}{3}$ from $\frac{11}{15}$. The second fraction $\frac{2}{3}$ is multiplied by $\frac{5}{5}$ to get $\frac{10}{15}$. The denominators are now both 15, and the numerators are subtracted: $11 - 10 = 1$.

c) $\frac{19}{20} - \frac{4}{5} = \frac{19}{20} - \frac{16}{20} = \frac{3}{20}$

$\frac{3}{16} + \frac{3}{4} = \frac{3}{16} + \frac{12}{16} = \frac{15}{16}$

d) $\frac{3}{14} + \frac{4}{7} = \frac{3}{14} + \frac{8}{14} = \frac{11}{14}$

$\frac{2}{5} - \frac{7}{25} = \frac{10}{25} - \frac{7}{25} = \frac{3}{25}$

e)

$$\frac{\frac{3}{4} - \frac{2}{3}}{\frac{3}{4} - \frac{2}{3}} = \frac{\frac{9}{12} - \frac{8}{12}}{\frac{9}{12} - \frac{8}{12}} = \frac{1}{12}$$

$$\frac{\frac{1}{2} + \frac{2}{5}}{\frac{1}{2} + \frac{2}{5}} = \frac{\frac{5}{10} + \frac{4}{10}}{\frac{5}{10} + \frac{4}{10}} = \frac{9}{10}$$

f)

$$\frac{1}{3} + \frac{3}{7} = \frac{7}{21} + \frac{9}{21} = \frac{16}{21}$$

$$\frac{3}{4} - \frac{2}{5} = \frac{15}{20} - \frac{8}{20} = \frac{7}{20}$$

S. 124 Nr. 5

a)

$$\frac{7}{8} + \frac{3}{4} = \frac{7}{8} + \frac{6}{8} = \frac{13}{8} = 1 \frac{5}{8}$$

$$\frac{9}{10} + \frac{2}{5} = \frac{9}{10} + \frac{4}{10} = \frac{13}{10} = 1 \frac{3}{10}$$

$$\frac{2}{3} + \frac{3}{4} = \frac{8}{12} + \frac{9}{12} = \frac{17}{12} = 1 \frac{5}{12}$$

b)

$$\frac{5}{6} + \frac{7}{12} = \frac{10}{12} + \frac{7}{12} = \frac{17}{12} = 1 \frac{5}{12}$$

$$\frac{1}{3} + \frac{5}{6} = \frac{2}{6} + \frac{5}{6} = \frac{7}{6} = 1 \frac{1}{6}$$

$$\frac{1}{5} + \frac{7}{8} = \frac{8}{40} + \frac{35}{40} = \frac{43}{40} = 1 \frac{3}{40}$$

c)

$$\frac{7}{9} + \frac{2}{3} = \frac{7}{9} + \frac{6}{9} = \frac{13}{9} = 1 \frac{4}{9}$$

$$\frac{2}{5} + \frac{3}{4} = \frac{8}{20} + \frac{15}{20} = \frac{23}{20} = 1 \frac{3}{20}$$

$$\frac{5}{7} + \frac{1}{3} = \frac{15}{21} + \frac{7}{21} = \frac{22}{21} = 1 \frac{1}{21}$$

Lösungen WP 8

S. 116 Nr. 10

$$a) \quad \frac{1}{2} + \frac{1}{4} + \frac{7}{8} = \frac{4}{8} + \frac{2}{8} + \frac{7}{8} = \frac{13}{8} = \underline{\underline{1 \frac{5}{8}}}$$

$$\frac{1}{3} + \frac{4}{9} + \frac{5}{6} = \frac{6}{18} + \frac{8}{18} + \frac{15}{18} = \frac{29}{18} = \underline{\underline{1 \frac{11}{18}}}$$

$$\frac{7}{8} + \frac{3}{4} + \frac{5}{12} = \frac{21}{24} + \frac{18}{24} + \frac{10}{24} = \frac{49}{24} = \underline{\underline{2 \frac{1}{24}}}$$

$$b) \quad \frac{2}{5} + \frac{3}{10} + \frac{3}{4} = \frac{8}{20} + \frac{6}{20} + \frac{15}{20} = \frac{29}{20} = \underline{\underline{1 \frac{9}{20}}}$$

$$\frac{7}{10} + \frac{7}{20} + \frac{3}{5} = \frac{14}{20} + \frac{7}{20} + \frac{12}{20} = \frac{33}{20} = \underline{\underline{1 \frac{13}{20}}}$$

$$\frac{2}{5} + \frac{9}{10} + \frac{21}{25} = \frac{20}{50} + \frac{45}{50} + \frac{42}{50} = \frac{107}{50} = \underline{\underline{2 \frac{7}{50}}}$$

$$c) \quad \frac{3}{4} + \frac{1}{12} + \frac{3}{8} = \frac{18}{24} + \frac{2}{24} + \frac{9}{24} = \frac{29}{24} = \underline{\underline{1 \frac{5}{24}}}$$

$$\frac{1}{6} + \frac{11}{15} + \frac{2}{3} = \frac{5}{30} + \frac{22}{30} + \frac{20}{30} = \frac{47}{30} = \underline{\underline{1 \frac{17}{30}}}$$

$$\frac{3}{5} + \frac{7}{10} + \frac{3}{4} = \frac{12}{20} + \frac{14}{20} + \frac{15}{20} = \frac{41}{20} = \underline{\underline{2 \frac{1}{20}}}$$

$$d) \quad \frac{9}{10} + \frac{13}{15} - \frac{2}{5} = \frac{27}{30} + \frac{26}{30} - \frac{12}{30} = \frac{41}{30} = \underline{\underline{1 \frac{11}{30}}}$$

$$\frac{5}{6} - \frac{3}{8} + \frac{7}{12} = \frac{20}{24} - \frac{9}{24} + \frac{14}{24} = \frac{25}{24} = \underline{\underline{1 \frac{1}{24}}}$$

$$\frac{24}{25} - \frac{2}{5} + \frac{9}{10} = \frac{48}{50} - \frac{20}{50} + \frac{45}{50} = \frac{73}{50} = \underline{\underline{1 \frac{23}{50}}}$$

Ungleichnamige Brüche addieren und subtrahieren

6 Berechne. Schreibe das Ergebnis als gemischte Zahl.

$$\frac{7}{12} + \frac{11}{15} = \frac{35}{60} + \frac{44}{60} = \frac{79}{60} = 1 \frac{19}{60}$$

a) $\frac{4}{5} + \frac{5}{6} =$ _____

b) $\frac{22}{3} - \frac{1}{2} =$ _____

$\frac{7}{8} + \frac{5}{12} =$ _____

$\frac{15}{11} - \frac{1}{4} =$ _____

$\frac{3}{4} + \frac{5}{6} =$ _____

$\frac{11}{6} - \frac{5}{8} =$ _____

7 Berechne.

$$2\frac{4}{5} + \frac{2}{3} = 2\frac{12}{15} + \frac{10}{15} = 2\frac{22}{15} = 3\frac{7}{15}$$

a) $6\frac{4}{5} + \frac{3}{8} = 6\frac{32}{40} + \frac{15}{40} = 6\frac{47}{40} = 7\frac{7}{40}$

b) $7\frac{3}{8} + \frac{2}{3} = 7\frac{9}{24} + \frac{16}{24} = 7\frac{25}{24} = 8\frac{1}{24}$

$5\frac{5}{6} + \frac{3}{5} = 5\frac{25}{30} + \frac{18}{30} = 5\frac{43}{30} = 6\frac{13}{30}$

$1\frac{2}{3} + \frac{4}{5} = 1\frac{10}{15} + \frac{12}{15} = 1\frac{22}{15} = 2\frac{7}{15}$

$8\frac{2}{3} + \frac{9}{10} = 8\frac{20}{30} + \frac{27}{30} = 8\frac{47}{30} = 9\frac{17}{30}$

$6\frac{3}{5} + \frac{5}{8} = 6\frac{24}{40} + \frac{25}{40} = 6\frac{49}{40} = 7\frac{9}{40}$

$4\frac{6}{7} + \frac{3}{4} = 4\frac{24}{28} + \frac{21}{28} = 4\frac{45}{28} = 5\frac{17}{28}$

$2\frac{3}{4} + \frac{7}{8} = 2\frac{6}{8} + \frac{7}{8} = 2\frac{13}{8} = 3\frac{5}{8}$

8 Berechne.

$$6\frac{3}{10} - \frac{4}{5} = 6\frac{3}{10} - \frac{8}{10} = 5\frac{13}{10} - \frac{8}{10} = 5\frac{5}{10} = 5\frac{1}{2}$$

a) $3\frac{2}{5} - \frac{3}{4} = 3\frac{8}{20} - \frac{15}{20} = \frac{68}{20} - \frac{15}{20} = \frac{53}{20} = 2\frac{13}{20}$

b) $8\frac{1}{5} - \frac{2}{3} = 8\frac{3}{15} - \frac{10}{15} = \frac{123}{15} - \frac{10}{15} = \frac{113}{15} = 7\frac{8}{15}$

$4\frac{1}{7} - \frac{1}{2} = 4\frac{2}{14} - \frac{7}{14} = \frac{58}{14} - \frac{7}{14} = \frac{51}{14} = 3\frac{9}{14}$

$6\frac{1}{3} - \frac{1}{2} = 6\frac{2}{6} - \frac{3}{6} = \frac{38}{6} - \frac{3}{6} = \frac{35}{6} = 5\frac{5}{6}$

$6\frac{1}{3} - \frac{3}{8} = 6\frac{8}{24} - \frac{9}{24} = \frac{152}{24} - \frac{9}{24} = \frac{143}{24} = 5\frac{23}{24}$

$5\frac{1}{5} - \frac{5}{8} = 5\frac{8}{40} - \frac{25}{40} = \frac{208}{40} - \frac{25}{40} = \frac{183}{40} = 4\frac{23}{40}$

$3\frac{1}{4} - \frac{2}{3} = 3\frac{3}{12} - \frac{8}{12} = \frac{39}{12} - \frac{8}{12} = \frac{31}{12} = 2\frac{7}{12}$

$9\frac{3}{10} - \frac{2}{3} = 9\frac{9}{30} - \frac{20}{30} = \frac{279}{30} - \frac{20}{30} = \frac{259}{30} = 8\frac{19}{30}$

9 Bei richtiger Lösung erhältst du die Namen von drei großen Städten in Europa.

a) $3\frac{3}{4} + \frac{3}{4} = 4\frac{1}{2}$ $4\frac{6}{8} + \frac{1}{3} = 5\frac{1}{12}$ $5 - \frac{4}{10} = 4\frac{3}{5}$ $3\frac{1}{2} + 3\frac{1}{6} = 6\frac{2}{3}$ $6\frac{3}{5} - 2\frac{3}{10} = 4\frac{3}{10}$

b) $4\frac{7}{12} + \frac{3}{4} = 5\frac{1}{3}$ $7\frac{1}{2} - \frac{5}{6} = 6\frac{2}{3}$ $2\frac{2}{5} + 4\frac{1}{2} = 6\frac{9}{10}$ $3\frac{9}{12} + \frac{12}{16} = 4\frac{1}{2}$ $7\frac{1}{10} - \frac{2}{5} = 6\frac{7}{10}$

c) $3\frac{1}{5} + 2\frac{5}{8} = 5\frac{33}{40}$ $3\frac{1}{10} + 1\frac{1}{5} = 4\frac{3}{10}$ $1\frac{5}{8} + \frac{3}{4} = 2\frac{3}{8}$ $6\frac{13}{15} - \frac{1}{5} = 6\frac{2}{3}$ $9\frac{8}{9} - 5\frac{7}{18} = 4\frac{1}{2}$

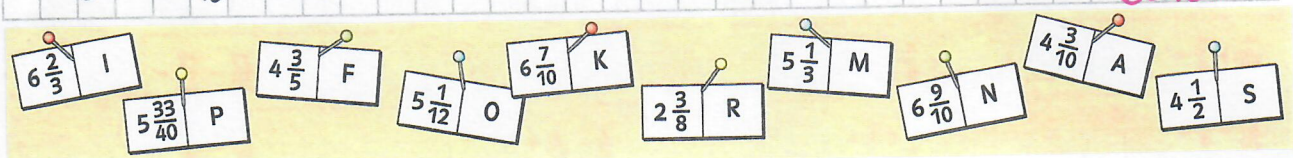
a) $3\frac{3}{4} + \frac{3}{4} = 3\frac{6}{4} = 4\frac{2}{4} = 4\frac{1}{2}$ S $4\frac{6}{8} + \frac{1}{3} = 4\frac{18}{24} + \frac{8}{24} = 4\frac{26}{24} = 5\frac{2}{24} = 5\frac{1}{12}$ O

$5 - \frac{4}{10} = \frac{50}{10} - \frac{4}{10} = \frac{46}{10} = 4\frac{6}{10} = 4\frac{3}{5}$ F

$3\frac{1}{2} + 3\frac{1}{6} = 3\frac{3}{6} + 3\frac{1}{6} = 6\frac{4}{6} = 6\frac{2}{3}$ I

$6\frac{3}{5} - 2\frac{3}{10} = 6\frac{6}{10} - 2\frac{3}{10} = \frac{66}{10} - \frac{23}{10} = \frac{43}{10} = 4\frac{3}{10}$ A

b)/c) nächste Seite!



Namen der Städte: SOFIA MINSK PARIS

$$b) \quad 4 \frac{7}{12} + \frac{3}{4} = 4 \frac{7}{12} + \frac{9}{12} = 4 \frac{16}{12} = 5 \frac{4}{12} = \underline{\underline{5 \frac{1}{3}}} \quad M$$

$$7 \frac{1}{2} - \frac{5}{6} = 7 \frac{3}{6} - \frac{5}{6} = \frac{45}{6} - \frac{5}{6} = \frac{40}{6} = 6 \frac{4}{6} = \underline{\underline{6 \frac{2}{3}}} \quad I$$

$$2 \frac{2}{5} + 4 \frac{1}{2} = 2 \frac{4}{10} + 4 \frac{5}{10} = \underline{\underline{6 \frac{9}{10}}} \quad N$$

$$3 \frac{9}{12} + \frac{12}{16} = 3 \frac{3}{4} + \frac{3}{4} = 3 \frac{6}{4} = 4 \frac{2}{4} = \underline{\underline{4 \frac{1}{2}}} \quad S$$

kürzen

$$7 \frac{1}{10} - \frac{2}{5} = 7 \frac{1}{10} - \frac{4}{10} = \frac{71}{10} - \frac{4}{10} = \frac{67}{10} = \underline{\underline{6 \frac{7}{10}}} \quad K$$

$$c) \quad 3 \frac{1}{5} + 2 \frac{5}{8} = 3 \frac{8}{40} + 2 \frac{25}{40} = \underline{\underline{5 \frac{33}{40}}} \quad P$$

$$3 \frac{1}{10} + 1 \frac{1}{5} = 3 \frac{1}{10} + 1 \frac{2}{10} = \underline{\underline{4 \frac{3}{10}}} \quad A$$

$$1 \frac{5}{8} + \frac{3}{4} = 1 \frac{5}{8} + \frac{6}{8} = 1 \frac{11}{8} = \underline{\underline{2 \frac{3}{8}}} \quad R$$

$$6 \frac{13}{15} - \frac{1}{5} = 6 \frac{13}{15} - \frac{3}{15} = 6 \frac{10}{15} = \underline{\underline{6 \frac{2}{3}}} \quad I$$

$$9 \frac{8}{9} - 5 \frac{7}{18} = 9 \frac{16}{18} - 5 \frac{7}{18} = 4 \frac{9}{18} = \underline{\underline{4 \frac{1}{2}}} \quad S$$

S. 119 Nr. 13

$$\frac{1}{2} + \frac{2}{3} + \frac{3}{4} = \frac{6}{12} + \frac{8}{12} + \frac{9}{12} = \frac{23}{12} = 1 \frac{11}{12}$$

⇒ richtig! Buchstabe: S

$$\frac{5}{6} + \frac{2}{5} + \frac{1}{2} = \frac{25}{30} + \frac{12}{30} + \frac{15}{30} = \frac{52}{30} = 1 \frac{22}{30} = 1 \frac{11}{15}$$

⇒ richtig! Buchstabe: E

$$\frac{3}{4} + \frac{5}{6} - \frac{11}{12} = \frac{9}{12} + \frac{10}{12} - \frac{11}{12} = \frac{8}{12} = \frac{2}{3}$$

⇒ falsch! Buchstabe: A

$$\frac{2}{5} + \frac{3}{4} - \frac{9}{10} = \frac{8}{20} + \frac{15}{20} - \frac{18}{20} = \frac{5}{20} = \frac{1}{4}$$

⇒ richtig! Buchstabe: N

Lösungswort: SEAN

Lösungen WP 9

S. 175 Nr. 4

$$a) \quad \frac{1}{7} \cdot 3 = \frac{1}{7} \cdot \frac{3}{1} = \frac{1 \cdot 3}{7 \cdot 1} = \underline{\underline{\frac{3}{7}}}$$

$$b) \quad \frac{2}{11} \cdot 5 = \frac{2}{11} \cdot \frac{5}{1} = \frac{2 \cdot 5}{11 \cdot 1} = \underline{\underline{\frac{10}{11}}}$$

$$c) \quad \frac{1}{7} \cdot 6 = \frac{1}{7} \cdot \frac{6}{1} = \frac{1 \cdot 6}{7 \cdot 1} = \underline{\underline{\frac{6}{7}}}$$

$$d) \quad \frac{2}{13} \cdot 6 = \frac{2}{13} \cdot \frac{6}{1} = \frac{2 \cdot 6}{13 \cdot 1} = \underline{\underline{\frac{12}{13}}}$$

$$e) \quad \frac{2}{17} \cdot 3 = \frac{2}{17} \cdot \frac{3}{1} = \frac{2 \cdot 3}{17 \cdot 1} = \underline{\underline{\frac{6}{17}}}$$

$$f) \quad \frac{4}{19} \cdot 4 = \frac{4}{19} \cdot \frac{4}{1} = \frac{4 \cdot 4}{19 \cdot 1} = \underline{\underline{\frac{16}{19}}}$$

S. 175 Nr. 5

$$a) \quad \frac{2}{11} \cdot 5 = \frac{10}{11}$$

$$b) \quad \frac{2}{15} \cdot 7 = \frac{14}{15}$$

$$c) \quad \frac{2}{9} \cdot 4 = \frac{8}{9}$$

$$d) \quad \frac{2}{7} \cdot 3 = \frac{6}{7}$$

S. 175 Nr. 6

$$a) \quad \frac{1}{6} \cdot 5 = \underline{\underline{\frac{5}{6}}}$$

$$b) \quad \frac{12}{15} \cdot 7 = \frac{84}{15} = 5 \frac{9}{15} = \underline{\underline{5 \frac{3}{5}}}$$

$$c) \quad \frac{4}{25} \cdot 10 = \frac{40}{25} = 1 \frac{15}{25} = \underline{\underline{1 \frac{3}{5}}} \quad d) \quad \frac{2}{3} \cdot 20 = \frac{40}{3} = \underline{\underline{13 \frac{1}{3}}}$$

$$e) \quad \frac{3}{45} \cdot 15 = \frac{45}{45} = \underline{\underline{1}}$$

$$f) \quad \frac{14}{36} \cdot 9 = \frac{126}{36} = 3 \frac{18}{36} = \underline{\underline{3 \frac{1}{2}}}$$

S. 176 Nr. 4

$$a) \frac{4}{5} \cdot \frac{3}{7} = \frac{4 \cdot 3}{5 \cdot 7} = \frac{12}{35}$$

$$\frac{1}{2} \cdot \frac{5}{9} = \frac{1 \cdot 5}{2 \cdot 9} = \frac{5}{18}$$

$$b) \frac{3}{4} \cdot \frac{3}{5} = \frac{3 \cdot 3}{4 \cdot 5} = \frac{9}{20}$$

$$\frac{2}{7} \cdot \frac{5}{11} = \frac{2 \cdot 5}{7 \cdot 11} = \frac{10}{77}$$

$$c) \frac{7}{12} \cdot \frac{1}{3} = \frac{7 \cdot 1}{12 \cdot 3} = \frac{7}{36}$$

$$\frac{3}{8} \cdot \frac{5}{16} = \frac{3 \cdot 5}{8 \cdot 16} = \frac{15}{128}$$

$$d) \frac{3}{5} \cdot \frac{6}{7} = \frac{3 \cdot 6}{5 \cdot 7} = \frac{18}{35}$$

$$\frac{5}{8} \cdot \frac{3}{7} = \frac{5 \cdot 3}{8 \cdot 7} = \frac{15}{56}$$

$$e) \frac{6}{7} \cdot \frac{4}{13} = \frac{6 \cdot 4}{7 \cdot 13} = \frac{24}{91}$$

$$\frac{11}{13} \cdot \frac{3}{4} = \frac{11 \cdot 3}{13 \cdot 4} = \frac{33}{52}$$

$$f) \frac{4}{9} \cdot \frac{4}{5} = \frac{4 \cdot 4}{9 \cdot 5} = \frac{16}{45}$$

$$\frac{8}{13} \cdot \frac{2}{7} = \frac{8 \cdot 2}{13 \cdot 7} = \frac{16}{91}$$