

1. Übung

15. September 69

"lim" Zahlen (1x3)

3 6 9 12 15 18 21 24 27 30 33 36 39 42
45 48 51 54 57 60 63 66 69 72 75 78 81 84
87 90 93 96 99

"bam" Zahlen (1x3)

③ 13 23 ⑩ 31 32 ⑬ 34 35 ⑯ 37 38 ⑯ 43
53 ⑬ 73 83 ⑨⑬

1. Hausaufgabe

15. September

"lim" Zahlen (1x5)

5 10 15 20 25 30 35 40 45 50 55 60 65 70
75 80 85 90 95 100

"bam" Zahlen (1x5)

⑤ ⑯ ⑯ ⑯ ⑯ ⑯ 51 52 53 54 ⑯ 56 57 58
59 ⑯ ⑯ ⑯ ⑯

"lim" Zahlen (1x4)

4 8 12 16 20 24 28 32 36 40 44 48 52
56 60 64 68 72 76 80 84 88 92 96 100

"bram" Zahlen (1x4)

④ 14 24 34 40 41 42 43 44 45 46 47 48 49
54 64 74 84 94

gls. k.

2. Übung

$$\begin{array}{r}
 48 & 765 & 537 & 815 & 2 & 853 & 009 \\
 209 & 317 & 806 & 430 & 6 & 407 & 820 \\
 86 & 736 & 93 & 288 & 15 & 081 & 362 \\
 416 & 844 & 750 & 084 & 75 & 999 & 400 \\
 \hline
 5630 & 904 & 86 & 024 & 73 + 73 & 68 & 794 \\
 \hline
 822 & 569 & 273 & 634 & 26 & 109 & 785
 \end{array}$$

$$\begin{array}{r}
 560 & 386 & 000 \\
 1514 & 500 & 000 \\
 364 & 344 & 000 \\
 216 & 965 & 000 \\
 \hline
 1752 & 282 & 000 \\
 \hline
 2647 & 486 & 606
 \end{array}$$

$$\begin{array}{r}
 2 & 736 & - \\
 2 & 736 & 845 & 365 & 087 \\
 578 & 223 & 25 & 609 & 435 \\
 36 & 203 & 688 & 43 & 914 \\
 \hline
 1 & 7072 & 73225 & + 21 & 5701 & 726 \\
 \hline
 39 & 679 & 081 & 28 & 588 & 562
 \end{array}$$

$$\begin{array}{r}
 71 & 847 & 902 & 84 & 008 \\
 3004 & 286 & 5 & 760 & 653 \\
 720 & 503 & 17 & 241 & 800 \\
 \hline
 1 & 1822 & 8174 & + 24 & 9291 & 455 \\
 \hline
 45 & 655 & 508 & 095 & 916
 \end{array}$$

$$\begin{array}{r}
 8 & 016 & 509 \\
 78 & 602 \\
 635 & 048 \\
 40 & 3276 & 9293
 \end{array}$$

6. Skor.

$$\begin{array}{r}
 2 & 736 & 845 & 578 & 223 \\
 365 & 087 & 609 & 609 & 223 \\
 \hline
 71 & 847 & 902 & 004 & 435 \\
 & 94 & 008 & 760 & 435 \\
 \hline
 182 & 02362 & 52939 & 7382 & 286 \\
 \hline
 83 & 060 & 441 & 031 & 199
 \end{array}$$

$$\begin{array}{r}
 36 & 203 & 688 & 100 & 325 \\
 43 & 914 & 503 & 570 & 726 \\
 77 & 241 & 800 & 82 & 877 \\
 \hline
 1 & 635 & 078 & 999 & 455 \\
 \hline
 54 & 844 & 983 & 33762 & 3293 \\
 \hline
 39 & 619 & 087 & 129 & 716 \\
 28 & 588 & 962 & 129 & 716 \\
 16 & 655 & 508 & 844 & 983 \\
 24 & 095 & 916 & 12182 & 7276 \\
 \hline
 49 & 120347 & 22792 & 157 & 339 \\
 \hline
 159 & 066 & 339 & 066 & 339
 \end{array}$$

3. Übung

7. Skor.

Kordtheim-Westfalen

1939 - 1950 1950 - 1961

$$\begin{array}{r}
 13 & 194 & 000 & 15 & 901 & 700 \\
 11 & 934 & 400 & -13 & 194 & 000 \\
 \hline
 1 & 262 & 600 & 2 & 704 & 700
 \end{array}$$

1939 - 1961

$$\begin{array}{r}
 15 & 901 & 700 \\
 11 & 934 & 400 \\
 \hline
 3 & 984 & 300
 \end{array}$$

Bayern:

1939 - 1950			1950 - 1961			1939 - 1961		
9	184	500	9	591	900	9	591	900
-7	084	100	-9	18,4	500	-7	08,4	100
2	100	400	407	400	2	507	800	

Rheinland-Pfalz:

1939 - 1950			1950 - 1961			1939 - 1961		
3	007	800	3	438	500	3	438	500
2	9,60	000	-3	004	900	-2	9,60	000
044	800	433	700	448	500			

Baden-Württemberg:

1939 - 1950			1950 - 1961			1939 - 1961		
6	430	200	7	838	700	7	838	700
-5	476	000	-6	430	200	-5	476	000
954	200	7	408	500	2	362	700	

Sachsen-Anhalt:

1939 - 1950			1950 - 1961			1939 - 1961		
2	594	600	2	594	600	2	328	400
1	58,9	200	-2	32,8	400	-1	58,9	200
1	005	400	266	200	739	200		

Niedersachsen:

1939 - 1950			1950 - 1961			1939 - 1961		
1939 - 1950 mehr								
6	797	400	6	794	400	6	675	100
-4	43,9	700	-6	645	700	-4	43,9	700
2	357	700	122	300	2	235	400	

Hamburg:

1939 - 1950			1950 - 1961			1939 - 1961		
1939 - 1950 mehr								
1	411	900	1	840	500	1	840	500
-1	60,5	600	-1	60,5	600	-1	711	900
106	300	234	900	128	600			

Hessen:

1939 - 1950			1950 - 1961			1939 - 1961		
4	323	800	4	861	300	4	861	300
-3	479	900	-4	323	800	-3	479	900
844	900	537	500	1	382	206	45	800

Saarland:

1939 - 1950			1950 - 1961			1939 - 1961		
1939 - 1950								
1	082	500	1	082	500	-1	90,9	600
-1	95,5	400	-1	95,5	400	1	127	100
45	800	127	100	172	900			

Bremen:1939-1950 1950-1961 1939-1961
mehr

$$\begin{array}{r}
 562 \quad 900 \\
 -55,8 \quad 600 \\
 \hline
 4 \quad 300
 \end{array}
 \quad
 \begin{array}{r}
 712 \quad 200 \\
 -55,8 \quad 600 \\
 \hline
 153 \quad 600
 \end{array}
 \quad
 \begin{array}{r}
 712 \quad 200 \\
 -56,2 \quad 800 \\
 \hline
 449 \quad 300
 \end{array}$$

Westberlin:1939-1950 1950-1961 1939-1961
mehr

$$\begin{array}{r}
 2 \quad 750 \quad 500 \\
 -2 \quad 14,3 \quad 800 \\
 \hline
 602 \quad 700
 \end{array}
 \quad
 \begin{array}{r}
 2 \quad 188 \quad 700 \\
 -2 \quad 14,3 \quad 800 \\
 \hline
 40 \quad 900
 \end{array}
 \quad
 \begin{array}{r}
 2 \quad 750 \quad 500 \\
 -2 \quad 14,8 \quad 700 \\
 \hline
 561 \quad 800
 \end{array}$$

4. Übung

E

Z

H

10. März

$$\begin{array}{r}
 19 \quad 001 \quad | \quad 19 \quad 010 \quad | \quad 19 \quad 100 \\
 19 \quad 000 \quad | \quad 19 \quad 000 \quad | \quad 19 \quad 000 \\
 18 \quad 999 \quad | \quad 18 \quad 990 \quad | \quad 18 \quad 900
 \end{array}$$

$$\begin{array}{r}
 41 \quad 001 \quad | \quad 41 \quad 010 \quad | \quad 41 \quad 100 \\
 41 \quad 000 \quad | \quad 41 \quad 000 \quad | \quad 41 \quad 000 \\
 40 \quad 999 \quad | \quad 40 \quad 990 \quad | \quad 40 \quad 900
 \end{array}$$

$$\begin{array}{r}
 101 \quad 007 \quad | \quad 101 \quad 070 \quad | \quad 101 \quad 100 \\
 101 \quad 000 \quad | \quad 101 \quad 000 \quad | \quad 101 \quad 000 \\
 100 \quad 999 \quad | \quad 100 \quad 990 \quad | \quad 100 \quad 900
 \end{array}$$

$$\begin{array}{r}
 280 \quad 007 \quad | \quad 280 \quad 070 \quad | \quad 280 \quad 100 \\
 280 \quad 000 \quad | \quad 280 \quad 000 \quad | \quad 280 \quad 000 \\
 279 \quad 999 \quad | \quad 279 \quad 990 \quad | \quad 279 \quad 900
 \end{array}$$

$$\begin{array}{r}
 535 \quad 007 \quad | \quad 535 \quad 070 \quad | \quad 535 \quad 100 \\
 535 \quad 000 \quad | \quad 535 \quad 000 \quad | \quad 535 \quad 000 \\
 534 \quad 999 \quad | \quad 534 \quad 990 \quad | \quad 534 \quad 900
 \end{array}$$

$$\begin{array}{r}
 990 \quad 007 \quad | \quad 990 \quad 010 \quad | \quad 990 \quad 100 \\
 990 \quad 000 \quad | \quad 990 \quad 000 \quad | \quad 990 \quad 000 \\
 989 \quad 999 \quad | \quad 989 \quad 990 \quad | \quad 989 \quad 900
 \end{array}$$

$$\begin{array}{r}
 10 \quad 000 \quad -1 = 9 \quad 999 \\
 97 \quad 000 \quad -1 = 90 \quad 999 \\
 370 \quad 000 \quad -1 = 369 \quad 999 \\
 1 \quad 000 \quad 000 \quad -1 = 999 \quad 999 \\
 2 \quad 001 \quad 000 \quad -1 = 2 \quad 000 \quad 999
 \end{array}$$

$$\begin{array}{r}
 70 \quad 000 \quad -20 = 9 \quad 980 \\
 97 \quad 000 \quad -20 = 90 \quad 980 \\
 370 \quad 000 \quad -20 = 369 \quad 980 \\
 1 \quad 000 \quad 000 \quad -20 = 999 \quad 980 \\
 2 \quad 001 \quad 000 \quad -20 = 2 \quad 000 \quad 980
 \end{array}$$

$$\begin{array}{r}
 10 \quad 000 \quad -300 = 9 \quad 700 \\
 91 \quad 000 \quad -300 = 90 \quad 700 \\
 340 \quad 000 \quad -300 = 369 \quad 700 \\
 1 \quad 000 \quad 000 \quad -300 = 999 \quad 700 \\
 2 \quad 001 \quad 000 \quad -300 = 2 \quad 000 \quad 700
 \end{array}$$

$$\begin{array}{r}
 70 \quad 000 \quad -400 = 6 \quad 000 \\
 97 \quad 000 \quad -400 = 87 \quad 000 \\
 340 \quad 000 \quad -400 = 366 \quad 000 \\
 1 \quad 000 \quad 000 \quad -400 = 996 \quad 000 \\
 2 \quad 001 \quad 000 \quad -400 = 1 \quad 004 \quad 000
 \end{array}$$

$$\begin{array}{r}
 9 \quad 899 + 10 = 9 \quad 909 \\
 50 \quad 995 + 10 = 51 \quad 005 \\
 99 \quad 990 + 10 = 100 \quad 000 \\
 448 \quad 997 + 10 = 449 \quad 007 \\
 999 \quad 999 + 10 = 1 \quad 000 \quad 009
 \end{array}$$

$$\begin{array}{r}
 9 \quad 899 + 200 = 10 \quad 099 \\
 50 \quad 995 + 200 = 51 \quad 195 \\
 99 \quad 990 + 200 = 100 \quad 190 \\
 448 \quad 997 + 200 = 449 \quad 191 \\
 999 \quad 999 + 200 = 1 \quad 000 \quad 199
 \end{array}$$

Bremen:

$$\begin{array}{r} 1939 \\ - \text{mehr} \\ \hline 562 \quad 9 \\ - 558 \quad 6 \\ \hline 4 \quad 3 \end{array}$$

$$\begin{array}{r} 899 + 3000 = 12 \quad 899 \\ 50 \quad 895 + 3000 = 53 \quad 895 \\ 99 \quad 990 + 3000 = 102 \quad 990 \\ 448 \quad 991 + 3000 = 451 \quad 991 \\ 999 \quad 999 + 3000 = 1002 \quad 999 \end{array}$$

Westberlin

$$\begin{array}{r} 1939 \\ - \text{mehr} \\ \hline 2 \quad 750 \\ - 147 \\ \hline 602 \end{array}$$

4. Übung

$$\begin{array}{r} 19 \quad 0 \\ 19 \quad 0 \\ 18 \quad 9 \\ 41 \quad 0 \\ 41 \quad 0 \\ 40 \quad 9 \\ 101 \quad 0 \\ 101 \quad 0 \\ 100 \quad 9 \end{array}$$

$$\begin{array}{r} 280 \quad 0 \\ 280 \quad 0 \\ 279 \quad 0 \end{array}$$

$$\begin{array}{r} 535 \quad 0 \\ 535 \quad 0 \\ 534 \quad 0 \end{array}$$

Wir merken uns:

1.) Ich teile durch 2 ⚡ und bekomme $\frac{1}{2}$

2.) Ich teile durch 4 ⚡ und bekomme $\frac{1}{4}$

3.) Ich teile durch 8 ⚡ und bekomme $\frac{1}{8}$



$$1 \Phi = \frac{2}{2}$$

$$2 \Phi = \frac{\Phi}{2}$$

$$3 \Phi = \frac{6}{2}$$

$$4 \Phi = \frac{8}{2}$$

$$5 \Phi = \frac{10}{2}$$

$$6 \Phi = \frac{12}{2}$$

$$7 \Phi = \frac{14}{2}$$

$$8 \Phi = \frac{16}{2}$$

$$9 \Phi = \frac{18}{2}$$

$$10 \Phi = \frac{20}{2}$$

$$1 \otimes = \frac{4}{8}$$

$$2 \otimes = \frac{16}{8}$$

$$3 \otimes = \frac{24}{8}$$

$$4 \otimes = \frac{32}{8}$$

$$5 \otimes = \frac{40}{8}$$

$$6 \otimes = \frac{48}{8}$$

$$7 \otimes = \frac{56}{8}$$

$$8 \otimes = \frac{64}{8}$$

$$9 \otimes = \frac{72}{8}$$

$$10 \otimes = \frac{80}{8}$$

16. Hausaufgabe

$$1 \oplus = \frac{4}{4}$$

$$2 \oplus \oplus = \frac{8}{4}$$

$$3 \oplus \oplus \oplus = \frac{12}{4}$$

$$4 \oplus \oplus \oplus \oplus = \frac{16}{4}$$

$$5 \oplus \oplus \oplus \oplus \oplus = \frac{20}{4}$$

$$10 \oplus \oplus \oplus \oplus \oplus \oplus \oplus \oplus \oplus = \frac{40}{4}$$

$$6 \oplus \oplus \oplus \oplus \oplus \oplus = \frac{24}{4}$$

$$7 \oplus \oplus \oplus \oplus \oplus \oplus \oplus = \frac{28}{4}$$

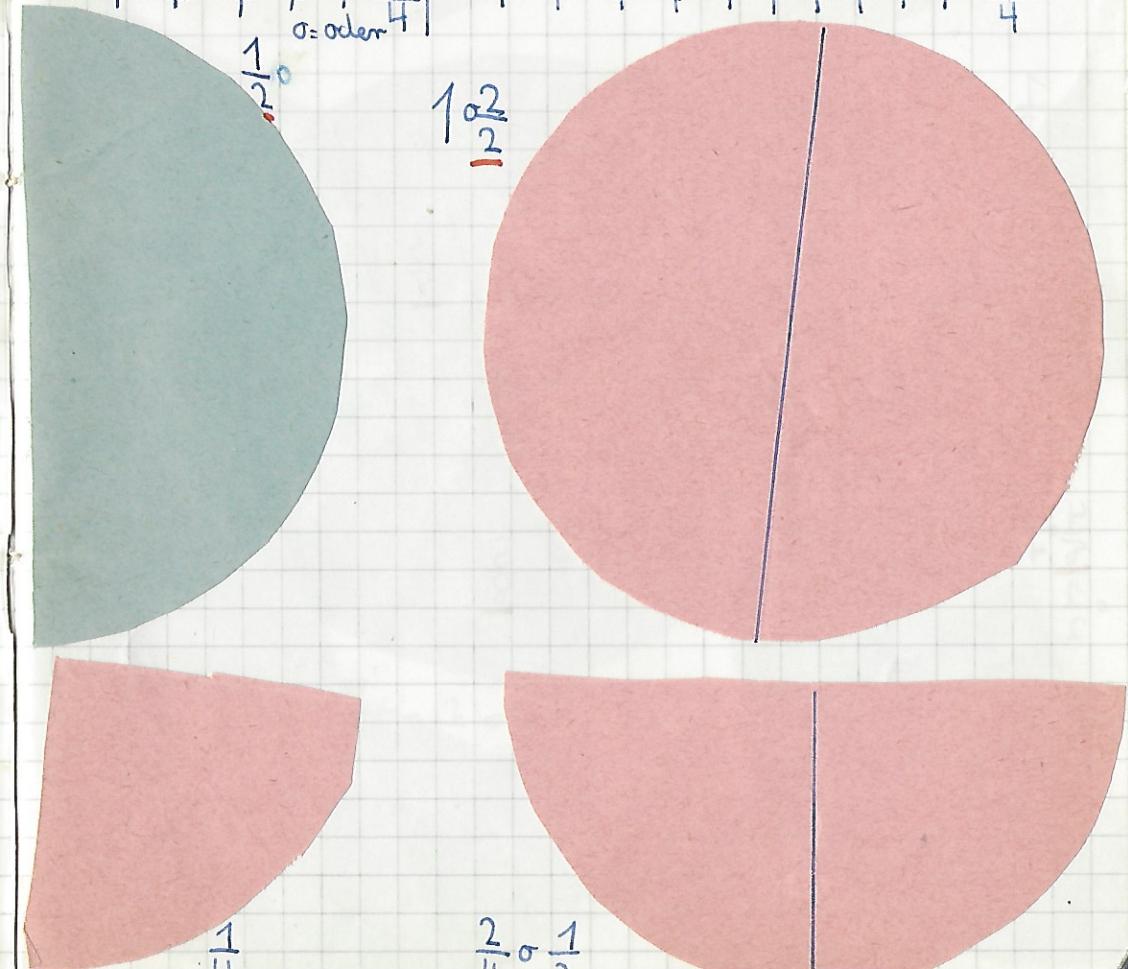
$$8 \oplus \oplus \oplus \oplus \oplus \oplus \oplus \oplus = \frac{32}{4}$$

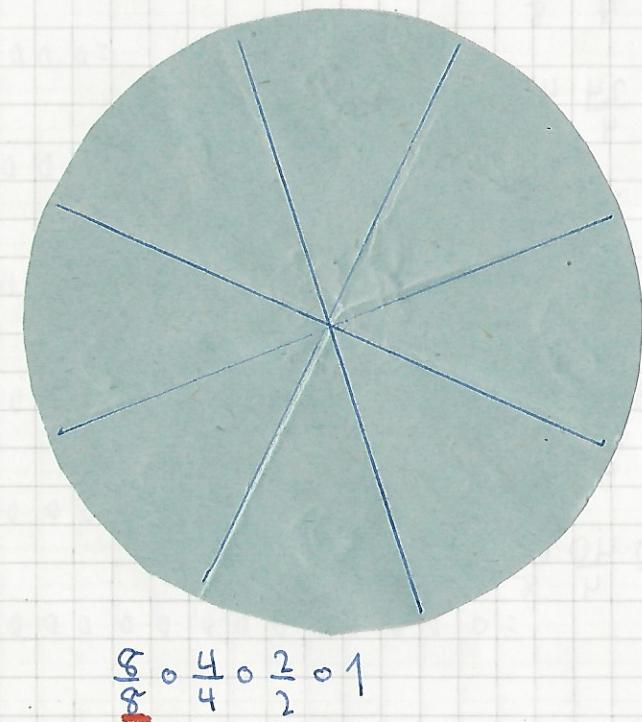
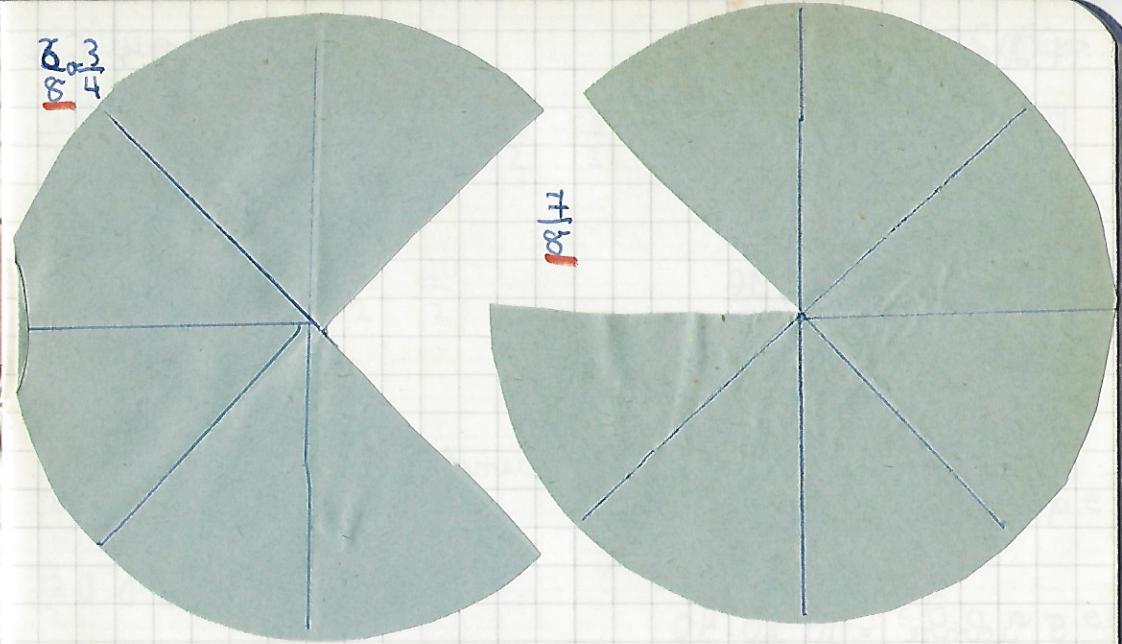
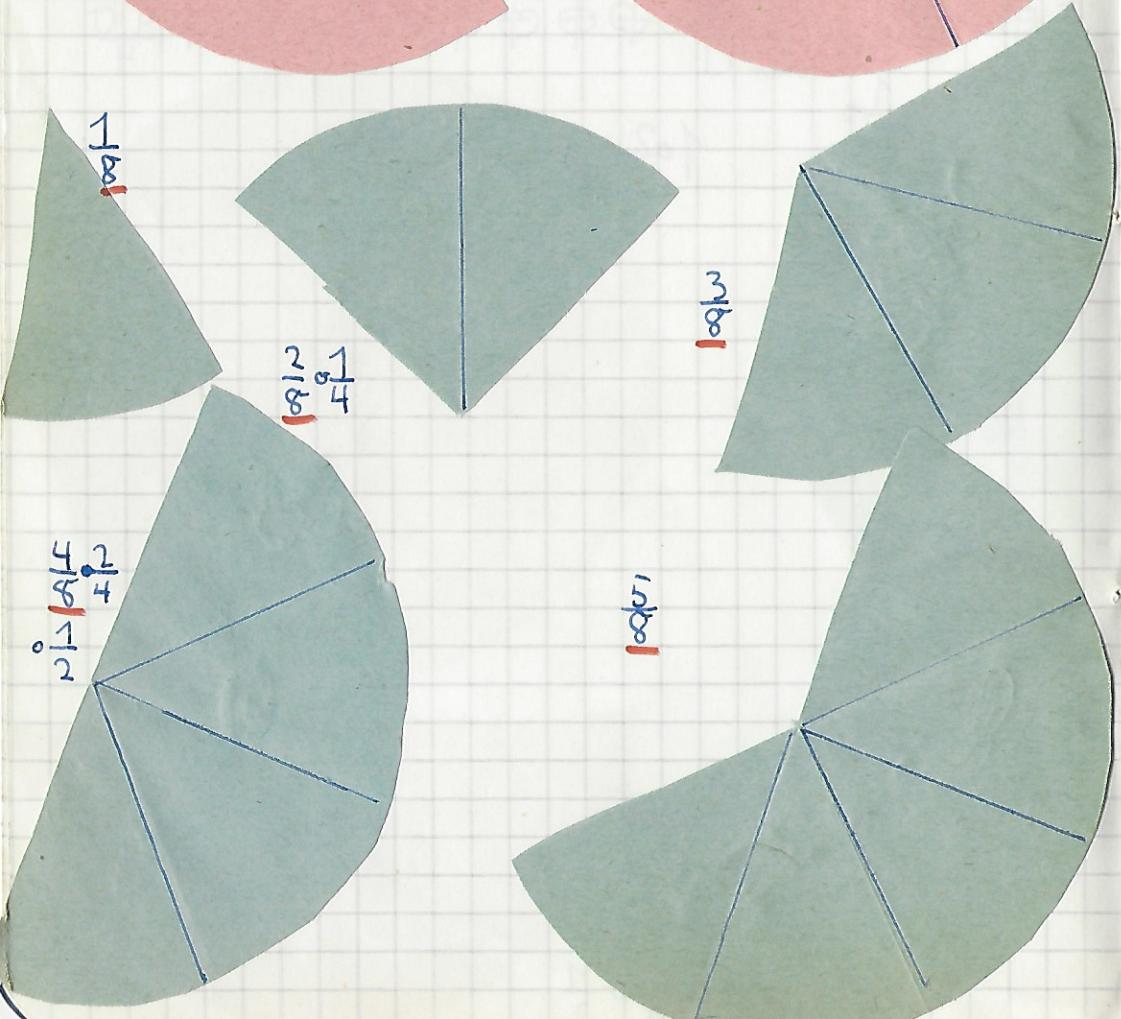
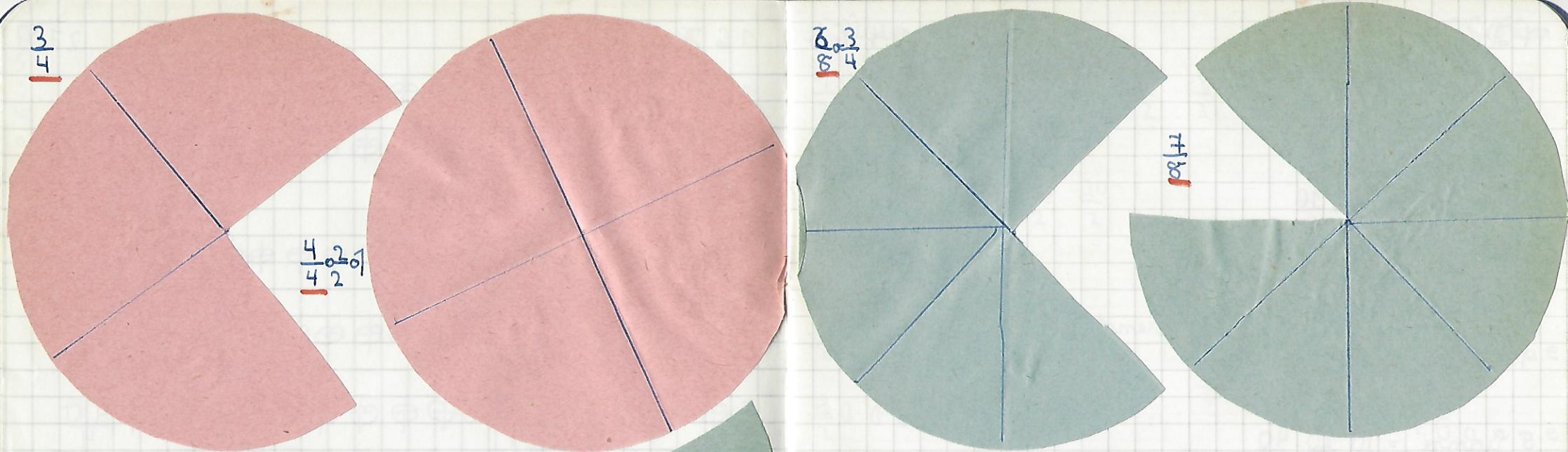
$$9 \oplus \oplus \oplus \oplus \oplus \oplus \oplus \oplus \oplus = \frac{36}{4}$$

$\frac{1}{2}^{\circ}$

$\text{o oder } \frac{4}{4}$

$1 \frac{1}{2}^{\circ}$





17. Hausaufgabe

$$1 \text{ ganze} = \frac{2}{2} \frac{4}{4} \frac{8}{8}$$

$$2 \text{ ganze} = \frac{4}{2} \frac{8}{4} \frac{16}{8}$$

$$3 \text{ ganze} = \frac{6}{2} \frac{12}{4} \frac{24}{8}$$

$$4 \text{ ganze} = \frac{8}{2} \frac{16}{4} \frac{32}{8}$$

$$5 \text{ ganze} = \frac{10}{2} \frac{20}{4} \frac{40}{8}$$

$$6 \text{ ganze} = \frac{12}{2} \frac{24}{4} \frac{48}{8}$$

$$7 \text{ ganze} = \frac{14}{2} \frac{28}{4} \frac{56}{8}$$

$$8 \text{ ganze} = \frac{16}{2} \frac{32}{4} \frac{64}{8}$$

$$9 \text{ ganze} = \frac{18}{2} \frac{36}{4} \frac{72}{8}$$

$$10 \text{ ganze} = \frac{20}{2} \frac{40}{4} \frac{80}{8}$$

24. Nov.

5. Übung

$\frac{1}{2}$	$\frac{2}{2}$	$\frac{3}{2}$	$\frac{4}{2}$	$\frac{5}{2}$	$\frac{6}{2}$	$\frac{7}{2}$	$\frac{8}{2}$	$\frac{9}{2}$	$\frac{10}{2}$	$\frac{11}{2}$	$\frac{12}{2}$	$\frac{13}{2}$	$\frac{14}{2}$
.	16		26		36		46		56		66		76
$\frac{15}{2}$	$\frac{16}{2}$	$\frac{17}{2}$	$\frac{18}{2}$	$\frac{19}{2}$	$\frac{20}{2}$								
	76		96		106								

$$\frac{1}{2} 0 =$$

Wir rechnen mit Zahlen

$$\frac{3}{2} 0 0 0 =$$

$$\frac{5}{2} 0 0 0 0 =$$

$$\frac{7}{2} 0 0 0 0 0 =$$

$$\frac{9}{2} 0 0 0 0 0 0 =$$

$$\frac{11}{2} 0 0 0 0 0 0 0 =$$

$$\frac{13}{2} 0 0 0 0 0 0 0 0 =$$

$$\frac{15}{2} 0 0 0 0 0 0 0 0 0 =$$

$$\frac{17}{2} 0 0 0 0 0 0 0 0 0 0 =$$

$$\frac{19}{2} 0 0 0 0 0 0 0 0 0 0 0 =$$

0 G a n z e

1 $\frac{1}{2}$ G a n z e2 $\frac{1}{2}$ G a n z e3 $\frac{1}{2}$ G a n z e4 $\frac{1}{2}$ G a n z e5 $\frac{1}{2}$ G a n z e6 $\frac{1}{2}$ G a n z e7 $\frac{1}{2}$ G a n z e8 $\frac{1}{2}$ G a n z e9 $\frac{1}{2}$ G a n z e

26. Nov.

18. Hausaufgabe

$$2G = \frac{4}{2} / 3G = \frac{6}{2} / 4G = \frac{8}{2} / 5G = \frac{10}{2} / 6G = \frac{12}{2} / 7G = \frac{14}{2} / 8G = \frac{16}{2} /$$

$$18\text{ Ganze} = \frac{36}{2}$$

$$20\text{ Ganze} = \frac{40}{2}$$

$$23\text{ Ganze} = \frac{46}{2}$$

$$19\text{ Ganze} = \frac{38}{2}$$

$$\frac{2}{2} = 1G / \frac{6}{2} = 3G / \frac{8}{2} = 4G / \frac{4}{2} = 2G / \frac{10}{2} = 5G / \frac{14}{2} = 7G /$$

$$\frac{30}{2} = 15G / \frac{28}{2} = 14 / \frac{26}{2} = 13 / \frac{24}{2} = 12 / \frac{22}{2} = 11G /$$

$$\frac{20}{2} = 10 / \frac{18}{2} = 9 / \frac{16}{2} = 8G / \frac{14}{2} = 7G / \frac{12}{2} = 6 / \frac{10}{2} = 5G / \frac{8}{2} = 4G /$$

$$\frac{6}{2} = 3G / \frac{4}{2} = 2G / \frac{2}{2} = 1G /$$

1	2	3	4	5	6	7	8	9	10	
$\frac{2}{2}$	$\frac{4}{2}$	$\frac{6}{2}$	$\frac{8}{2}$	$\frac{10}{2}$	$\frac{12}{2}$	$\frac{14}{2}$	$\frac{16}{2}$	$\frac{18}{2}$	$\frac{20}{2}$	→
$\frac{1}{2}$	$\frac{3}{2}$	$\frac{5}{2}$	$\frac{7}{2}$	$\frac{9}{2}$	$\frac{11}{2}$	$\frac{13}{2}$	$\frac{15}{2}$	$\frac{17}{2}$	$\frac{19}{2}$	$\frac{21}{2}$

26. Kor. 19. Hausaufgabe

$$^a) \frac{4}{2} + \frac{3}{2} = \frac{7}{2} = 3G \frac{1}{2} \quad ^b) \frac{3}{2} + \frac{7}{2} = \frac{10}{2} = 5G \frac{1}{2} \quad ^c) \frac{5}{2} + \frac{7}{2} = \frac{12}{2} = 6G \frac{1}{2} \quad ^d) \frac{8}{2} + \frac{12}{2} = \frac{20}{2} = 10G$$

$$\frac{6}{2} + \frac{5}{2} = \frac{11}{2} = 5G \frac{1}{2} \quad \frac{5}{2} + \frac{11}{2} = \frac{16}{2} = 8G \quad \frac{4}{2} + \frac{8}{2} = \frac{12}{2} = 6G \quad \frac{13}{2} + \frac{6}{2} = 9G \frac{1}{2}$$

$$^e) \frac{7}{2} - \frac{5}{2} = \frac{2}{2} = 1G \quad ^f) \frac{9}{2} - \frac{6}{2} = \frac{3}{2} = 1G \frac{1}{2} \quad ^g) \frac{13}{2} - \frac{7}{2} = \frac{6}{2} = 3G$$

$$^h) \frac{8}{2} - \frac{2}{2} = \frac{6}{2} = 3G \quad ^i) \frac{14}{2} - \frac{4}{2} = \frac{10}{2} = 5G \frac{1}{2}$$

$$^j) \frac{6}{2} + \frac{3}{2} = \frac{9}{2} = 4G \frac{1}{2} \quad ^k) \frac{5}{2} - \frac{4}{2} = \frac{1}{2} = 1G \quad ^l) \frac{4}{2} + \frac{7}{2} = \frac{11}{2} = 5G \frac{1}{2}$$

$$\frac{8}{2} + \frac{5}{2} = \frac{13}{2} = 6G \frac{1}{2} \quad \frac{15}{2} - \frac{5}{2} = \frac{10}{2} = 5G \quad \frac{12}{2} - \frac{5}{2} = \frac{7}{2} = 3G \frac{1}{2}$$

$$^m) \frac{7}{2} + \frac{7}{2} = \frac{14}{2} = 7G \quad \left(\frac{17}{2} - \frac{8}{2} = \frac{19}{2} = 9G \right) \frac{1}{2} - \frac{8}{2} = \frac{9}{2} = 4G \frac{1}{2}$$

Die Hälfte von 10 Äpfeln sind $\frac{10}{2}$

$\frac{1}{2}$ von 10 Äpfeln sind 5 Äpfel oder $\frac{1}{2}$ von 10 Birnen

$\frac{1}{2}$ von 14 Birnen sind 7 Äpfel oder $\frac{1}{2}$ von 16 Kürzen sind 8 Mäuse oder $\frac{1}{2}$ von 16 Schwestern sind 8 Schwestern

$\frac{1}{2}$ von 30 Schwestern sind 15 Schwestern

28. Kor.

$$\frac{1}{2} \text{ von } 5 \text{ Ø Pfennig sind } 2 \frac{1}{2} \text{ Pfennig}$$

$$\frac{1}{2} \text{ von } 7 \text{ 2 Pfennig sind } 4 \frac{1}{2} \text{ Pfennig}$$

$$\frac{1}{2} \text{ von } 5 \text{ 6 Pfennig sind } 2 \frac{1}{2} \text{ Pfennig}$$

$$\frac{1}{2} \text{ von } 3 \text{ DM } = 1 \text{ DM } 50 \text{ Pfennig}$$

$$\frac{1}{2} \text{ von } 1 \text{ DM } = 5 \text{ Ø Pfennig}$$

$$\frac{1}{2} \text{ von } 7 \text{ DM } = 3 \text{ DM } 50 \text{ Pfennig}$$

$$\frac{1}{2} \text{ von } 11 \text{ m } = 5 \text{ m } 50 \text{ cm oder } 5 \frac{1}{2} \text{ m}$$

$$\frac{1}{2} \text{ von } 20 \text{ m } = 10 \text{ m}$$

$$\frac{1}{2} \text{ von } 47 \text{ m } = 23 \text{ m } 50 \text{ cm oder } 23 \frac{1}{2} \text{ m}$$

20. Hausaufgabe

3. Dez.

$$\frac{1}{2} \text{ von } 92 = 46 / \frac{1}{2} \text{ von } 36 = 18 / \frac{1}{2} \text{ von } 98 = 49$$

$$\frac{1}{2} \text{ von } 54 = 27$$

$$\frac{1}{2} \text{ DM } = 50 \text{ Pf. } / \frac{1}{2} \text{ kg } = 500 \text{ g } / \frac{1}{2} \text{ m } = 50 \text{ cm } / \frac{1}{2} \text{ hl } = 50 \text{ l }$$

$$500 \text{ km } = \frac{1}{2} \text{ km } / 6 \text{ Stck. } = \frac{1}{2} \text{ Dbd. } / 50 \text{ Pf. } = \frac{1}{2} \text{ DM }$$

$$4 \times \frac{1}{2} = \frac{4}{2} \quad \text{P P P P} = \text{P P P}$$

$$6 \times \frac{1}{2} = \frac{6}{2} \quad \text{1 1 1 1 1 1} = \text{1 DM} \quad \text{1 DM} \quad \text{1 DM}$$

$$5 \times \frac{1}{2} = \frac{5}{2} \quad \text{0 0 0 0 0} = \text{0 0 0}$$

$$2 \times \frac{3}{2} = \frac{6}{2} \quad \text{1 1 1 1 1 1} = \text{0 0 0}$$

$$3 \times \frac{2}{2} = \frac{6}{2} \quad \text{W W W W W W} = \text{W W W}$$

Wir rechnen mit Vierteln

1.) Wir bilden Reihen:

$$1 \text{ G } \oplus \frac{4}{4}$$

$$8 \text{ G } \oplus \oplus \oplus \oplus \frac{32}{4}$$

$$2 \text{ G } \oplus \frac{8}{4}$$

$$9 \text{ G } \oplus \oplus \oplus \oplus \oplus \frac{36}{4}$$

$$3 \text{ G } \oplus \oplus \frac{12}{4}$$

$$10 \text{ G } \oplus \oplus \oplus \oplus \oplus \frac{40}{4}$$

$$4 \text{ G } \oplus \oplus \frac{16}{4}$$

$$11 \text{ G } \oplus \oplus \oplus \oplus \oplus \frac{44}{4}$$

$$5 \text{ G } \oplus \oplus \oplus \frac{20}{4}$$

$$12 \text{ G } \oplus \oplus \oplus \oplus \oplus \frac{48}{4}$$

$$6 \text{ G } \oplus \oplus \oplus \oplus \frac{24}{4}$$

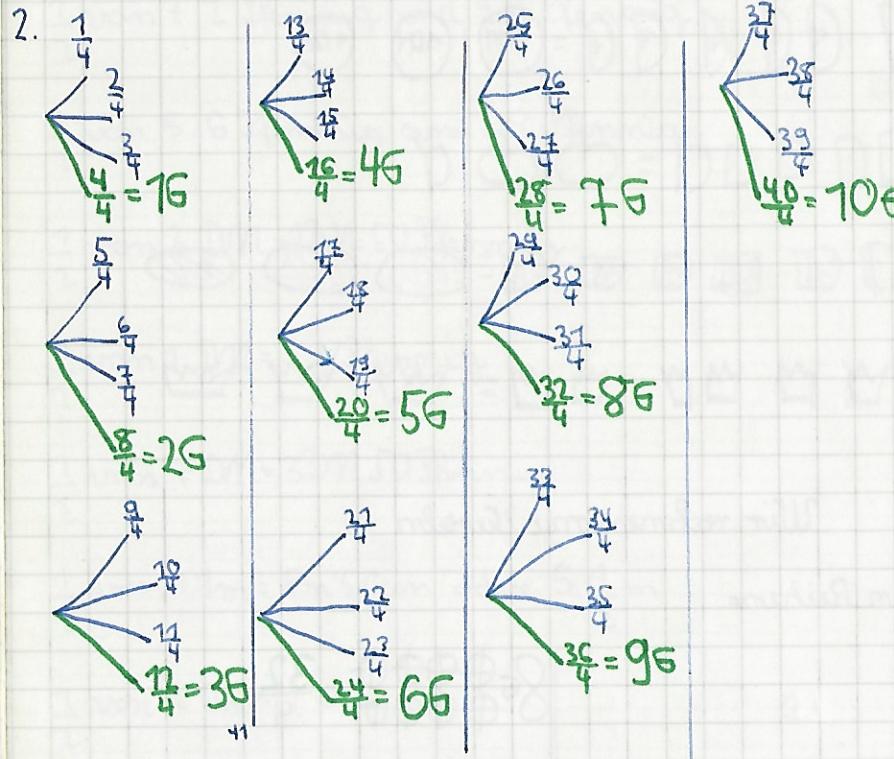
$$13 \text{ G } \oplus \oplus \oplus \oplus \oplus \oplus \frac{52}{4}$$

$$7 \text{ G } \oplus \oplus \oplus \oplus \oplus \frac{28}{4}$$

$$14 \text{ G } \oplus \oplus \oplus \oplus \oplus \oplus \frac{56}{4}$$

$$15 \frac{1}{4} = 15 \frac{4}{4} = 15 + \frac{1}{4}$$

$$\frac{60}{4}$$



$$3. \frac{1}{4} = 0G \frac{1}{4} \quad \frac{13}{4} = 3G \frac{1}{4}$$

$$\frac{3}{4} = 0G \frac{3}{4} \quad \frac{15}{4} = 3G \frac{3}{4}$$

$$\frac{5}{4} = 1G \frac{1}{4} \quad \frac{17}{4} = 4G \frac{1}{4}$$

$$\frac{7}{4} = 1G \frac{3}{4} \quad \frac{19}{4} = 4G \frac{3}{4}$$

$$\frac{9}{4} = 2G \frac{1}{4} \quad \frac{21}{4} = 5G \frac{1}{2}$$

$$\frac{11}{4} = 2G \frac{3}{4}$$

$$21. \text{ Hausaufgabe}$$

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

$$\frac{6}{4} + \frac{8}{4} = \frac{14}{4} = 3\frac{1}{2}$$

$$\frac{9}{4} + \frac{9}{4} = \frac{18}{4} = 4\frac{1}{2}$$

$$\frac{1}{4} + \frac{13}{4} = \frac{14}{4} = 3\frac{1}{2}$$

$$\frac{1}{4} + \frac{7}{4} = \frac{14}{4} = 3\frac{1}{2}$$

$$\frac{5}{4} + \frac{10}{4} = \frac{15}{4} = 3\frac{3}{4} \quad \frac{11}{4} + \frac{7}{4} = \frac{18}{4} = 4\frac{2}{4} \quad \frac{19}{4} + \frac{5}{4} = \frac{24}{4} = 6$$

$$\frac{21}{4} + \frac{12}{4} = \frac{33}{4} = 8\frac{1}{4} \quad \frac{24}{4} + \frac{9}{4} = \frac{33}{4} = 8\frac{1}{4}$$

$$\frac{8}{4} - \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4} \quad \frac{13}{4} - \frac{3}{4} = \frac{6}{4} = 1\frac{1}{2} \quad \frac{18}{4} - \frac{9}{4} = \frac{9}{4} = 2\frac{1}{4}$$

$$\frac{9}{4} - \frac{4}{4} = \frac{5}{4} = 1\frac{1}{4} \quad \frac{7}{4} - \frac{2}{4} = \frac{5}{4} = 1\frac{1}{4} \quad \frac{12}{4} - \frac{3}{4} = \frac{9}{4} = 2\frac{1}{2}$$

$$\frac{10}{4} - \frac{10}{4} = 0 \quad \frac{11}{4} - \frac{8}{4} = \frac{3}{4} = 2\frac{1}{4}$$

$$\frac{22}{4} - \frac{5}{4} = \frac{17}{4} = 4\frac{1}{4} \quad \frac{16}{4} - \frac{7}{4} = \frac{9}{4} = 2\frac{1}{4}$$

$$\frac{3}{4} + \frac{4}{4} = \frac{7}{4} = 1\frac{3}{4} \quad \frac{8}{4} - \frac{6}{4} = \frac{2}{4} \quad \frac{2}{4} + \frac{5}{4} = \frac{7}{4} = 1\frac{3}{4}$$

$$\frac{11}{4} + \frac{11}{4} = \frac{22}{4} = 5\frac{1}{2} \quad \frac{23}{4} - \frac{8}{4} = \frac{15}{4} = 3\frac{3}{4} \quad \frac{11}{4} - \frac{3}{4} = \frac{8}{4} = 2$$

$$\frac{15}{4} + \frac{7}{4} = \frac{22}{4} = 5\frac{1}{2} \quad \frac{24}{4} - \frac{5}{4} = \frac{19}{4} = 4\frac{3}{4}$$

pd.

12. Dez.

12. Hausaufgabe

12. Januar 70

Wir rechnen mit Brüchen

$$3 = \frac{24}{8} \quad 15 = \frac{120}{8} \quad 9 = \frac{72}{8} \quad 17 = \frac{136}{8} \quad \left| \begin{array}{l} \frac{16}{8} = 2 \\ \frac{24}{8} = 3 \\ \frac{72}{8} = 9 \end{array} \right.$$

$$7 = \frac{56}{8} \quad 13 = \frac{104}{8} \quad 20 = \frac{160}{8} \quad 25 = \frac{200}{8} \quad \left| \begin{array}{l} \frac{40}{8} = 5 \\ \frac{56}{8} = 7 \\ \frac{104}{8} = 13 \\ \frac{160}{8} = 20 \\ \frac{200}{8} = 25 \end{array} \right. \quad \frac{48}{8} = 6$$

7

$$\frac{64}{8} = 8 \quad \frac{32}{8} = 4 \quad \frac{96}{8} = 12$$

~~a, b, c, d, e~~

$$\frac{8}{8} + \frac{3}{8} = \frac{9}{8} = 1\frac{1}{8} \quad \frac{9}{8} + \frac{5}{8} = \frac{14}{8} = 1\frac{6}{8} \quad \frac{7}{8} + \frac{9}{8} = \frac{16}{8} = 2$$

$$\frac{13}{8} + \frac{7}{8} = \frac{20}{8} = 2\frac{4}{8} \quad \frac{17}{8} + \frac{6}{8} = \frac{23}{8} = 2\frac{7}{8} \quad \frac{21}{8} + \frac{11}{8} = \frac{32}{8} = 4$$

$$\frac{26}{8} + \frac{9}{8} = \frac{35}{8} = 4\frac{3}{8} \quad \frac{32}{8} + \frac{7}{8} = \frac{39}{8} = 4\frac{1}{8} \quad \frac{25}{8} + \frac{6}{8} = \frac{41}{8} = 5\frac{1}{8}$$

~~a, b, c, d, e~~

$$\frac{39}{8} + \frac{4}{8} = \frac{43}{8} = 5\frac{3}{8} \quad \frac{9}{8} - \frac{3}{8} = \frac{6}{8} = 0\frac{6}{8} \quad \frac{13}{8} - \frac{6}{8} = \frac{7}{8} = 0\frac{7}{8}$$

$$\frac{21}{8} - \frac{4}{8} = \frac{14}{8} = 1\frac{6}{8} \quad \frac{23}{8} - \frac{6}{8} = \frac{17}{8} = 2\frac{1}{8} \quad \frac{25}{8} - \frac{8}{8} = \frac{17}{8} = 2\frac{1}{8}$$

$$\frac{39}{8} - \frac{12}{8} = \frac{19}{8} = 2\frac{3}{8} \quad \frac{32}{8} - \frac{7}{8} = \frac{25}{8} = 3\frac{1}{8} \quad \frac{39}{8} - \frac{13}{8} = \frac{26}{8} = 3\frac{2}{8}$$

$$\frac{41}{8} - \frac{7}{8} = \frac{34}{8} = 4\frac{2}{8} \quad \frac{45}{8} - \frac{7}{8} = \frac{38}{8} = 4\frac{6}{8} \quad \frac{7}{8} + \frac{13}{8} = \frac{28}{8} \quad \checkmark$$

$$\frac{11}{8} + \frac{9}{8} = \frac{21}{8} \quad \frac{8}{8} - \frac{5}{8} = \frac{3}{8} \quad \frac{19}{8} - \frac{12}{8} = \frac{7}{8} \quad \frac{22}{8} + \frac{4}{8} = \frac{26}{8} \quad \frac{13}{8} + \frac{3}{8} = \frac{16}{8}$$

$$\frac{50}{8} - \frac{2}{8} = \frac{48}{8} \quad \frac{72}{8} - \frac{10}{8} = \frac{62}{8} \quad \text{gleich}$$

$\frac{1}{8} \text{ von } 480 \text{ DM} = 60 \text{ DM} \quad \frac{5}{8} \text{ von } 480 \text{ DM} = 300 \text{ DM} \quad \frac{7}{8} \text{ von } 84 \text{ m} = 73\frac{1}{2} \text{ m}$

$\frac{1}{8} \text{ von } 640 \text{ m} = 80 \text{ m} \quad \frac{3}{8} \text{ von } 640 \text{ m} = 240 \text{ m} \quad \frac{3}{8} \text{ von } 400 \text{ m} = 150 \text{ m}$

In 1 Stunde wurde an 2 Tischen $\frac{6}{8}$ von einer Obsttorte gegessen.

$$3 \cdot \frac{1}{8} = \frac{3}{8}$$

$$8 \cdot \frac{1}{8} = \frac{8}{8}$$

$$3 \cdot \frac{2}{8} = \frac{9}{8}$$

$$6 \cdot \frac{3}{8} = \frac{18}{8}$$

$\frac{12}{8} : 2 = \frac{6}{8}$

$\frac{12}{8} : 3 = \frac{4}{8}$

23. Hausaufgabe

$$\frac{1}{8} \text{ von } 16 \text{ DM} = 2 \text{ DM} \quad \frac{1}{8} \text{ von } 56 \text{ DM} = 7 \text{ DM} \quad \frac{1}{8} \text{ von } 32 \text{ DM} = 4 \text{ DM}$$

$$\frac{3}{8} \text{ von } 16 \text{ DM} = 6 \text{ DM} \quad \frac{5}{8} \text{ von } 56 \text{ DM} = 35 \text{ DM} \quad \frac{7}{8} \text{ von } 32 \text{ DM} = 28 \text{ DM}$$

$$\frac{5}{8} \text{ von } 24 \text{ m} = 15 \text{ m} \quad \frac{6}{8} \text{ von } 80 \text{ m} = 60 \text{ m} \quad \frac{4}{8} \text{ von } 72 \text{ m} = 36 \text{ m}$$

14. Jan.

24. Hausaufgabe

$$\frac{1}{2} = \frac{2}{4} \quad \frac{2}{4} = \frac{4}{8} \quad \frac{2}{6} = \frac{1}{4} \quad \frac{2}{2} = \frac{8}{8} \quad \frac{4}{4} = \frac{8}{8} \quad \frac{4}{8} = \frac{1}{2}$$

$$\frac{1}{2} = \frac{4}{8} \quad \frac{4}{8} = \frac{2}{4} \quad \frac{8}{8} = \frac{4}{4} \quad \frac{3}{4} = \frac{6}{8} \quad \frac{5}{8} = \frac{2}{2}$$

$$\frac{1}{4} = \frac{2}{8} \quad \frac{4}{4} = \frac{2}{2} \quad \frac{2}{2} = \frac{4}{4} \quad \frac{6}{8} = \frac{3}{4} \quad \frac{2}{4} = \frac{1}{2}$$

16. Januar

$$\frac{1}{2} = \frac{2}{4}$$

$$\frac{3}{4} = \frac{6}{8}$$

$$\frac{1}{4} = \frac{2}{8}$$

$$\frac{4}{4} = \frac{8}{8}$$

$$\frac{4}{8} = \frac{1}{2}$$

$$\frac{2}{4} = \frac{4}{8}$$

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

$$^b\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$$

$$^c\frac{5}{8} + \frac{1}{4} = \frac{7}{8}$$

$$^d\frac{1}{2} + \frac{4}{8} = \frac{5}{8}$$

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

$$\frac{1}{4} + \frac{1}{8} = \frac{3}{8}$$

$$\frac{1}{2} + \frac{2}{8} = \frac{6}{8}$$

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

$$\frac{1}{8} + \frac{1}{2} = \frac{5}{8}$$

$$\frac{1}{2} + \frac{3}{8} = \frac{7}{8}$$

$$\frac{2}{8} + \frac{1}{4} = \frac{4}{8}$$

$$\frac{4}{8} + \frac{1}{4} = \frac{6}{8}$$

25. Hausaufgabe

$$^a\frac{1}{2} - \frac{3}{8} = \frac{1}{8}$$

$$^b\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$$

$$^c\frac{3}{8} - \frac{1}{4} = \frac{1}{8}$$

$$^d\frac{6}{8} - \frac{1}{2} = \frac{2}{8}$$

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

$$\frac{7}{8} - \frac{3}{4} = \frac{1}{8}$$

$$\frac{5}{8} - \frac{1}{4} = \frac{3}{8}$$

$$\frac{4}{4} - \frac{4}{8} = \frac{4}{8}$$

$$\frac{1}{2} - \frac{1}{8} = \frac{3}{8}$$

$$\frac{1}{4} - \frac{1}{8} = \frac{1}{8}$$

$$\frac{1}{2} - \frac{3}{8} = \frac{2}{8}$$

$$\frac{5}{8} - \frac{1}{8} = \frac{1}{8}$$

$$^a\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$$

$$^b\frac{3}{8} + \frac{1}{8} = \frac{1}{2}$$

$$^c\frac{2}{8} + \frac{3}{8} = \frac{2}{4}$$

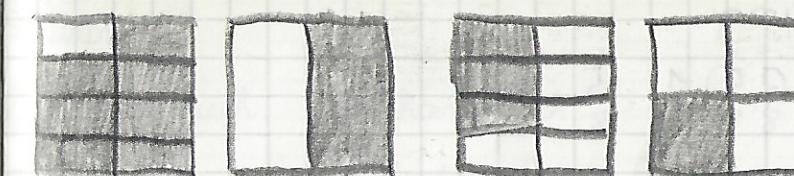
$$^d\frac{3}{4} - \frac{2}{8} = \frac{4}{8}$$

$$\frac{1}{8} + \frac{1}{8} = \frac{2}{8}$$

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

$$\frac{3}{8} + \frac{3}{8} = \frac{3}{4}$$

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



Der Unterschied zwischen

$$\frac{1}{8} \text{ und } 2 = \frac{3}{8}$$

Der Unterschied zwischen

$$\frac{3}{8} \text{ und } \frac{1}{4} = \frac{1}{8}$$



Der Unterschied zwischen

$$\frac{5}{8} \text{ und } \frac{1}{2} = \frac{1}{8}$$

Der Unterschied zwischen

$$\frac{1}{2} \text{ und } \frac{3}{4} = \frac{1}{4}$$

26. Hausaufgabe



20. Jan.

Der Unterschied zwischen $\frac{1}{8}$ und $\frac{1}{4}$ ist

$$\frac{5}{8}$$



Der Unterschied zwischen $\frac{5}{8}$ und $\frac{1}{4}$ ist

$$\frac{3}{8}$$



Der Unterschied zwischen $\frac{1}{2}$ und $\frac{3}{8}$ ist

$$\frac{1}{8}$$



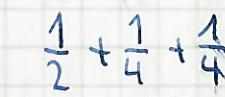
Der Unterschied zwischen $\frac{3}{4}$ und $\frac{1}{4}$ ist

$$\frac{1}{4}$$



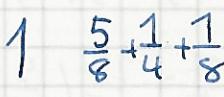
Der Unterschied zwischen $\frac{1}{2}$ und $\frac{2}{8}$ ist

$$\frac{4}{4} \text{ und } \frac{2}{2} = 0$$



Der Unterschied zwischen $\frac{3}{8}$ und $\frac{1}{2}$ ist

$$\frac{1}{4} + \frac{3}{8} + \frac{3}{8} = 1$$



Der Unterschied zwischen $\frac{5}{8}$ und $\frac{1}{4}$ ist

$$\frac{1}{2} + \frac{1}{4} + \frac{1}{4} = 1$$

23. Jan.

Größenordnung

$$\frac{1}{2} \quad \frac{3}{4} \quad \frac{5}{8} \quad (\frac{4}{8} \quad \frac{6}{8} \quad \frac{5}{8}) \quad \frac{1}{2} \quad \frac{5}{8} \quad \frac{3}{4}$$

$$\frac{7}{8} \quad \frac{3}{4} \quad \frac{1}{4} \quad \frac{1}{2} \quad (\frac{7}{8} \quad \frac{6}{8} \quad \frac{2}{8} \quad \frac{4}{8}) \quad \frac{7}{8} \quad \frac{3}{4} \quad \frac{1}{2} \quad \frac{1}{4}$$

$$\frac{6}{2} \quad \frac{8}{4} \quad \frac{12}{8} \quad \frac{3}{4} \quad (\frac{24}{8} \quad \frac{16}{8} \quad \frac{12}{8} \quad \frac{6}{4}) \quad \frac{6}{2} \quad \frac{8}{4} \quad \frac{12}{8} \quad \frac{3}{4}$$

23. Hausaufgabe Wir rechnen mit Fünfteln 29. Jan.

$$13 = \frac{65}{5} / 15 = \frac{75}{5} / 18 = \frac{90}{5} / 20 = \frac{100}{5} /$$

$$\frac{10}{5} = 2 / \frac{20}{5} = 4 / \frac{25}{5} = 5 / \frac{45}{5} = 9 / \frac{65}{5} = 13 / \frac{80}{5} = 16 / \frac{95}{5} = 19$$

$$\frac{17}{5} - \frac{9}{5} = \frac{3}{5} / \frac{11}{5} - \frac{9}{5} = \frac{8}{5} / \frac{23}{5} - \frac{9}{5} = \frac{14}{5} / \frac{19}{5} - \frac{9}{5} = \frac{10}{5} / \frac{26}{5} - \frac{9}{5} = \frac{11}{5}$$

$$\frac{12}{5} - \frac{12}{5} = \frac{0}{5} / \frac{14}{5} - \frac{12}{5} = \frac{5}{5} / \frac{23}{5} - \frac{12}{5} = \frac{11}{5} / \frac{19}{5} - \frac{12}{5} = \frac{1}{5} / \frac{26}{5} - \frac{12}{5} = \frac{14}{5}$$

$$\frac{12}{5} - \frac{3}{5} = \frac{9}{5} / \frac{11}{5} - \frac{3}{5} = \frac{14}{5} / \frac{23}{5} - \frac{3}{5} = \frac{20}{5} / \frac{19}{5} - \frac{3}{5} = \frac{16}{5} / \frac{26}{5} - \frac{3}{5} = \frac{23}{5}$$

$$\frac{4}{5} + \frac{4}{5} = \frac{11}{5} / \frac{9}{5} + \frac{7}{5} = \frac{16}{5} / \frac{6}{5} + \frac{3}{5} = \frac{13}{5} / \frac{11}{5} + \frac{4}{5} = \frac{18}{5} / \frac{15}{5} + \frac{7}{5} = \frac{22}{5}$$

$$\frac{4}{5} + \frac{1}{5} = \frac{5}{5} / \frac{9}{5} + \frac{1}{5} = \frac{10}{5} / \frac{6}{5} + \frac{1}{5} = \frac{7}{5} / \frac{11}{5} + \frac{1}{5} = \frac{12}{5} / \frac{15}{5} + \frac{1}{5} = \frac{16}{5}$$

$$\frac{4}{5} + \frac{17}{5} = \frac{21}{5} / \frac{9}{5} + \frac{17}{5} = \frac{26}{5} / \frac{6}{5} + \frac{17}{5} = \frac{23}{5} / \frac{11}{5} + \frac{17}{5} = \frac{28}{5} / \frac{15}{5} + \frac{17}{5} = \frac{32}{5}$$

5. Übung

30. Januar 70

Echter Bruch: Unerchter Bruch:

$$\frac{1}{2} = 0(\frac{1}{2}) \frac{1}{2}$$

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

$$\frac{3}{4} = 0(\frac{1}{4}) \frac{3}{4}$$

$$\frac{1}{4} = 1 \frac{3}{4} \quad \frac{7}{4}$$

$$\frac{5}{8} = 0(\frac{3}{8}) \frac{5}{8}$$

$$\frac{8}{5} = 1 \frac{3}{5} \quad \frac{8}{5}$$

$$\frac{4}{5} = 0(\frac{1}{5}) \frac{4}{5}$$

$$\frac{12}{10} = 1 \frac{2}{10} \quad \frac{12}{10}$$

1. Echter Bruch

Der Nenner ist größer als der Zähler
Beispiele:

$$\frac{3}{5} \quad \frac{7}{10} \quad \frac{1}{4} \quad \frac{4}{5} \quad \frac{5}{8} \quad \frac{1}{2}$$

2.) Beim echten Bruch gibt es nie ganze! O ganze

3.) Unerchter Bruch:

Zähler ist größer als Nenner.

Beispiele:

$$\frac{6}{4} \quad \frac{8}{2} \quad \frac{4}{5} \quad \frac{8}{2} \quad \frac{1}{3} \quad 0 \quad \frac{9}{8} \quad \frac{11}{10}$$

4.) Beim unechten Bruch gilt es immer ganze!

5.) Im unechten Bruch sind immer **Ganze** "versteckt"

Wenn ich die **Ganzen** heraussehe, bleibt ein Rest!

6. Wenn ich einen **unechten** Bruch verwandle, be-

- komme ich **Ganze** und einen Bruch; ich nenne
dass eine **Gemischte Zahl**

6.2.

$$\frac{5}{2} = 2 \frac{1}{2} \quad \frac{10}{4} = 2 \frac{2}{4} \quad \frac{14}{5} = 2 \frac{4}{5}$$

28. Hausaufgabe Wir rechnen mit Zehnteln 30. Jan

$$2 = \frac{20}{10} / 6 = \frac{60}{10} / 9 = \frac{90}{10} / 11 = \frac{110}{10} / 13 = \frac{130}{10} / 18 = \frac{180}{10} / 20 = \frac{200}{10}$$

$$\frac{30}{10} = 3 / \frac{70}{10} = 4 / \frac{110}{10} = 11 / \frac{50}{10} = 5 / \frac{80}{10} = 8 / \frac{200}{10} = 20 / \frac{170}{10} = 17$$

$$\frac{9}{10} - \frac{5}{10} = \frac{4}{10} / \frac{14}{10} - \frac{5}{10} = \frac{9}{10} / \frac{17}{10} - \frac{5}{10} = \frac{12}{10} / \frac{22}{10} - \frac{5}{10} = \frac{17}{10} / \frac{40}{10} - \frac{5}{10} = \frac{35}{10}$$

$$\frac{9}{10} - \frac{4}{10} = \frac{5}{10} / \frac{14}{10} - \frac{4}{10} = \frac{10}{10} / \frac{17}{10} - \frac{4}{10} = \frac{13}{10} / \frac{22}{10} - \frac{4}{10} = \frac{15}{10} / \frac{40}{10} - \frac{4}{10} = \frac{36}{10} / \frac{44}{10} = \frac{44}{10}$$

$$\frac{9}{10} - \frac{6}{10} = \frac{3}{10} / \frac{14}{10} - \frac{6}{10} = \frac{8}{10} / \frac{17}{10} - \frac{6}{10} = \frac{11}{10} / \frac{22}{10} - \frac{6}{10} = \frac{16}{10} / \frac{40}{10} - \frac{6}{10} = \frac{34}{10} / \frac{42}{10} = \frac{42}{10} / \frac{12}{10} = 1 \frac{2}{10}$$

$$\frac{13}{10} + \frac{10}{10} = \frac{23}{10} / \frac{4}{10} + \frac{10}{10} = \frac{14}{10} / \frac{27}{10} + \frac{10}{10} = \frac{37}{10} / \frac{52}{10} + \frac{10}{10} = \frac{42}{10} / \frac{8}{10} + \frac{10}{10} = \frac{18}{10} / \frac{14}{10} = 4 \frac{4}{10} / \frac{56}{10} = 5 \frac{6}{10}$$

$$\frac{13}{10} + \frac{3}{10} = \frac{16}{10} / \frac{4}{10} + \frac{3}{10} = \frac{7}{10} / \frac{27}{10} + \frac{3}{10} = \frac{30}{10} / \frac{32}{10} + \frac{3}{10} = \frac{35}{10} / \frac{8}{10} + \frac{3}{10} = \frac{11}{10} / \frac{1}{2} = 3 \frac{1}{2} / \frac{15}{10} = 3 \frac{3}{4} / \frac{14}{10} = 3 \frac{2}{4} / \frac{21}{10} = 2 \frac{1}{10}$$

$$\frac{13}{10} + \frac{12}{10} = \frac{25}{10} / \frac{4}{10} + \frac{12}{10} = \frac{16}{10} / \frac{27}{10} + \frac{12}{10} = \frac{39}{10} / \frac{32}{10} + \frac{12}{10} = \frac{44}{10} / \frac{8}{10} + \frac{12}{10} = \frac{20}{10} / \frac{36}{10} = 4 \frac{4}{8} / \frac{48}{5} = 9 \frac{3}{5} / \frac{52}{10} = 5 \frac{2}{10} / \frac{57}{8} = 7 \frac{1}{8}$$

29. Hausaufgabe

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

$$\frac{9}{4} = 2 \frac{1}{4} \quad \frac{11}{4} = 2 \frac{3}{4} \quad \frac{17}{4} = 4 \frac{1}{4} \quad \frac{23}{4} = 5 \frac{3}{4} \quad \frac{26}{4} = 5 \frac{1}{4}$$

$$\frac{3 \frac{5}{8}}{8} = \frac{29}{8} \quad 1 \frac{1}{8} = \frac{9}{8} \quad 2 \frac{3}{8} = \frac{19}{8} \quad 4 \frac{1}{8} = \frac{33}{8} \quad 6 \frac{7}{8} = \frac{55}{8}$$

$$\frac{5 \frac{5}{8}}{8} = \frac{45}{8} \quad 3 \frac{1}{8} = \frac{25}{8} \quad 4 \frac{7}{8} = \frac{39}{8} \quad 7 \frac{3}{8} = \frac{59}{8}$$

$$\frac{11}{8} = 1 \frac{3}{8} \quad \frac{17}{8} = 2 \frac{1}{8} \quad \frac{19}{8} = 2 \frac{3}{8} \quad 2 \frac{7}{8} = 3 \frac{3}{8} \quad \frac{35}{8} = 4 \frac{3}{8}$$

$$\frac{39}{8} = 4 \frac{1}{8} \quad \frac{57}{8} = 7 \frac{1}{8}$$

6. Übung

$$1 \frac{1}{10} = \frac{11}{10} \quad 6 \frac{4}{10} = \frac{64}{10} \quad 3 \frac{4}{10} = \frac{34}{10} \quad 5 \frac{6}{10} = \frac{56}{10} \quad 4 \frac{9}{10} = \frac{49}{10}$$

$$1 \frac{2}{10} = \frac{21}{10} \quad 1 \frac{8}{10} = 1 \frac{8}{10} \quad 2 \frac{1}{10} = 2 \frac{1}{10} \quad 2 \frac{9}{10} = 2 \frac{9}{10} \quad 3 \frac{2}{10} = 3 \frac{2}{10} \quad 3 \frac{5}{10} = 3 \frac{5}{10}$$

$$1 \frac{3}{10} = 3 \frac{1}{2} / \frac{15}{10} = 3 \frac{3}{4} / \frac{14}{10} = 3 \frac{2}{4} / \frac{21}{10} = 2 \frac{1}{10} \quad 1 \frac{4}{10} = 4 \frac{4}{10} / \frac{56}{10} = 5 \frac{6}{10}$$

$$1 \frac{1}{2} = 3 \frac{1}{2} / \frac{11}{10} = 3 \frac{3}{4} / \frac{14}{10} = 3 \frac{2}{4} / \frac{21}{10} = 2 \frac{1}{10} \quad 1 \frac{9}{10} = 4 \frac{3}{4} / \frac{24}{10} = 6 \frac{3}{4}$$

4. Februar

$$1\frac{1}{2} = \frac{3}{2} \quad 2\frac{3}{4} = \frac{11}{4} \quad 1\frac{1}{5} = \frac{6}{5} \quad 2\frac{3}{10} = \frac{23}{10} \quad 3\frac{1}{2} = \frac{7}{2} \quad 3\frac{3}{4} = \frac{15}{4}$$

$$5\frac{1}{8} = \frac{41}{8} \quad 4\frac{7}{10} = \frac{47}{10} \quad 3\frac{9}{10} = \frac{39}{10} \quad 2\frac{4}{5} = \frac{14}{5}$$

30. Hausaufgabe

3. Feb.

$$\frac{3}{4} + \frac{3}{4} = \underline{1\frac{1}{2}} + \frac{3}{4} = \underline{2\frac{1}{4}} + \frac{3}{4} = \underline{3} + \frac{3}{4} = \underline{3\frac{3}{4}} + \frac{3}{4} = \underline{4\frac{1}{2}} + \frac{3}{4} =$$

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

Reihen:

a) $1\frac{3}{8} \quad 1\frac{5}{8} \quad 1\frac{7}{8} \quad 2\frac{1}{8} \quad 2\frac{3}{8} \quad 2\frac{5}{8} \quad 2\frac{7}{8} \quad 3\frac{1}{8} \quad 3\frac{3}{8}$

b) $3\frac{5}{8} \quad 3\frac{7}{8}$

c) $1\frac{1}{5} \quad 1\frac{3}{5} \quad 2 \quad 2\frac{3}{5} \quad 2\frac{4}{5} \quad 3\frac{1}{5} \quad 3\frac{3}{5} \quad 4 \quad 4\frac{2}{5} \quad 4\frac{4}{5} \quad 5\frac{1}{5}$

d) $10\frac{1}{4} \quad 9\frac{3}{4} \quad 8\frac{3}{4} \quad 8 \quad 7\frac{1}{4} \quad 6\frac{3}{4} \quad 5\frac{3}{4} \quad 5 \quad 4\frac{1}{4} \quad 3\frac{3}{4}$

e) $2\frac{3}{4} \quad 2 \quad 1\frac{1}{4} \quad \frac{3}{4}$

f) $5\frac{3}{10} - 5\frac{1}{10} \quad 4\frac{9}{10} \quad 4\frac{7}{10} \quad 4\frac{5}{10} \quad 4\frac{3}{10} \quad 4\frac{1}{10} \quad 3\frac{9}{10} \quad 3\frac{7}{10} \quad 3\frac{5}{10}$

g) $3\frac{3}{10} \quad 3\frac{1}{10} \quad 2\frac{9}{10} \quad 2\frac{7}{10} \quad 2\frac{5}{10} \quad 2\frac{3}{10} \quad 2\frac{1}{10} \quad 1\frac{9}{10} \quad 1\frac{7}{10} \quad 1\frac{5}{10}$

h) $1\frac{3}{10} \quad 1\frac{1}{10} \quad \frac{9}{10} \quad \frac{7}{10} \quad \frac{5}{10} \quad \frac{3}{10} \quad \frac{1}{10}$