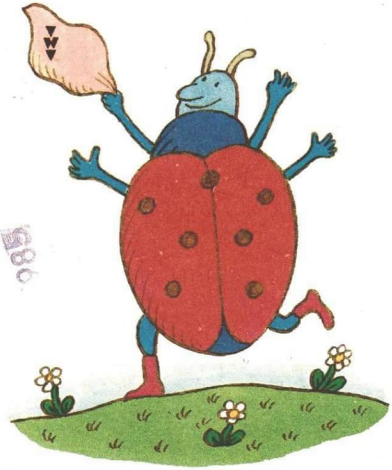
Mathematik

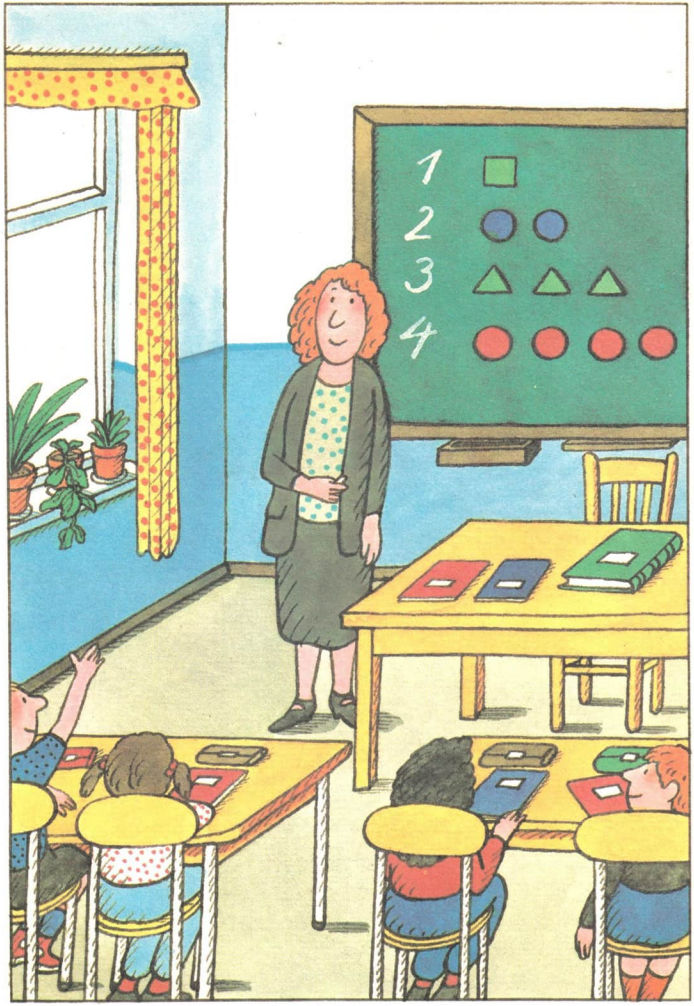
1

Mathematik

Lehrbuch für Klasse 1

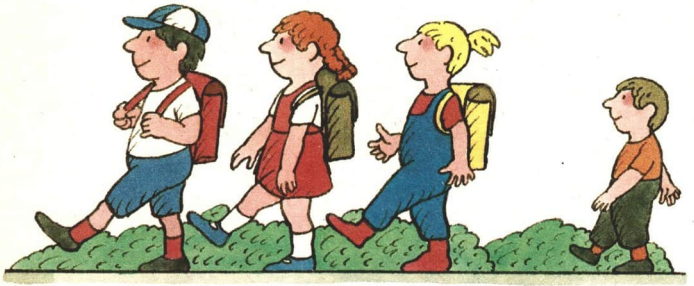


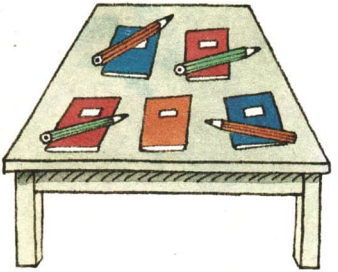
Volk und Wissen
Volkseigener Verlag Berlin
1984

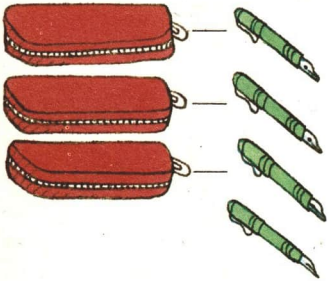

1
2
3
4

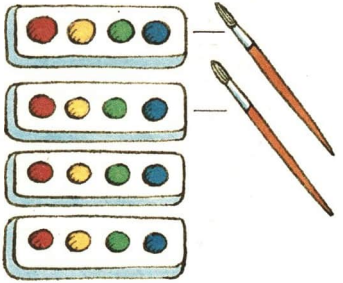
Vergleichen von Mengen

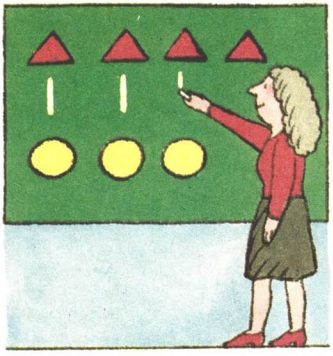
„weniger", „mehr", „gleich viel"

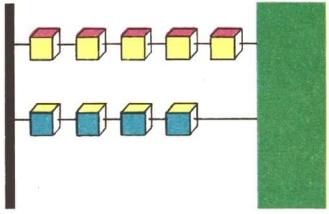


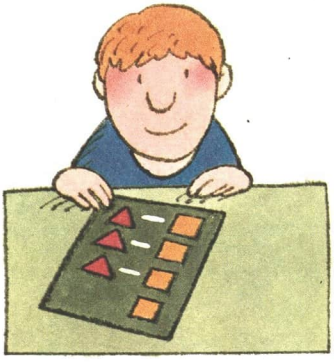


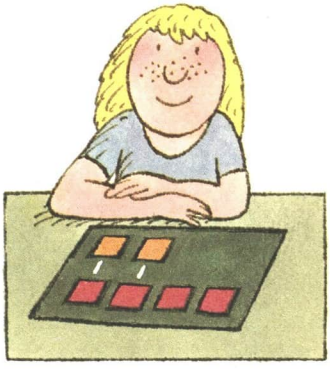


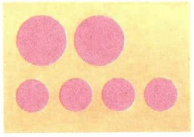


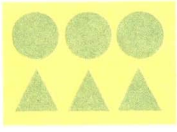


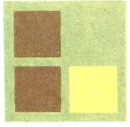




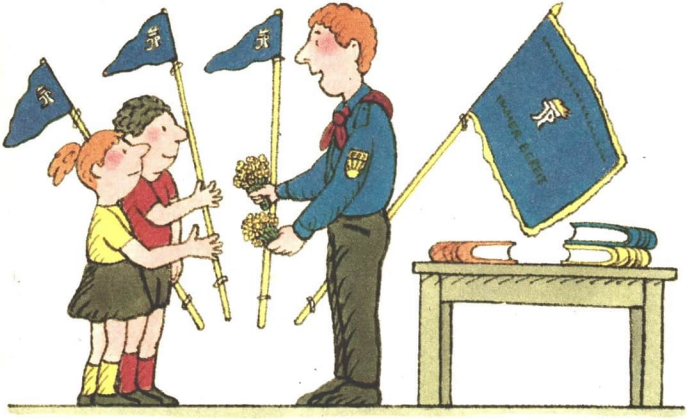


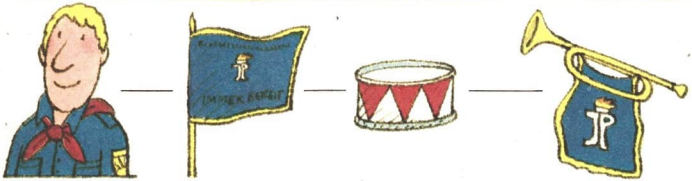


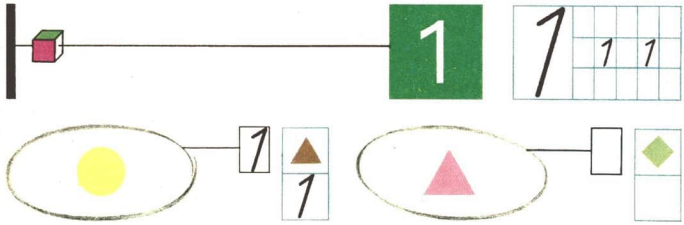


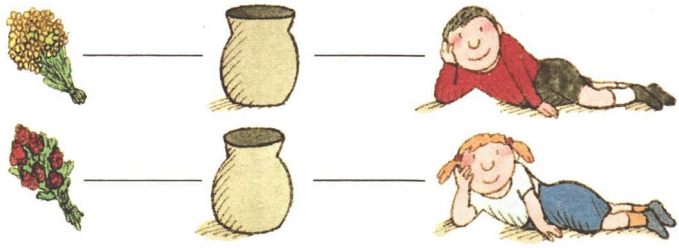


Die Zahlen von 1 bis 5









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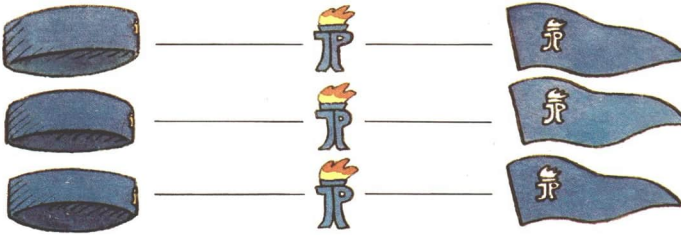
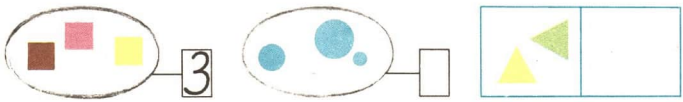
2
2 2

2



3
3
3 3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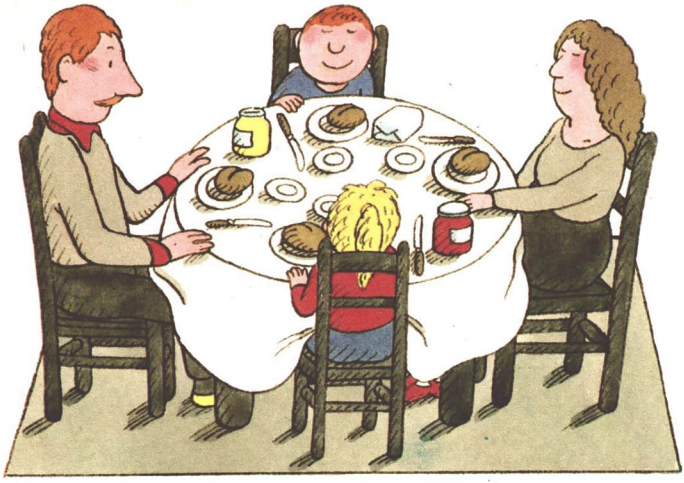

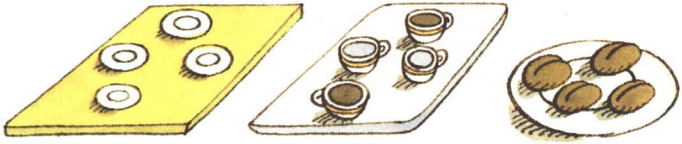

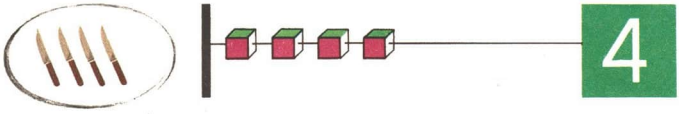
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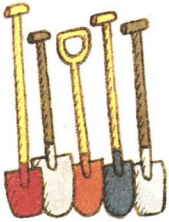
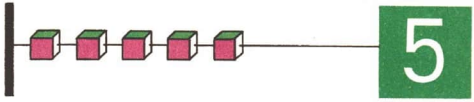
4 4
4

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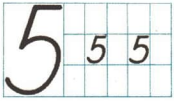
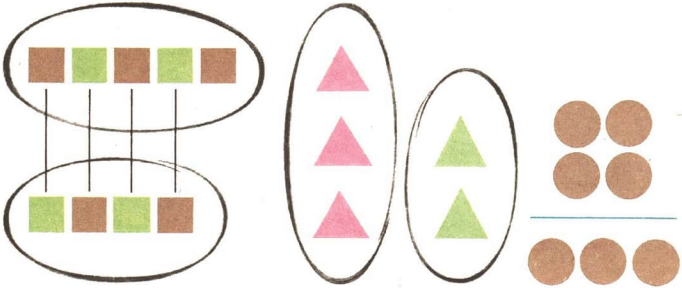
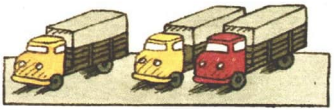
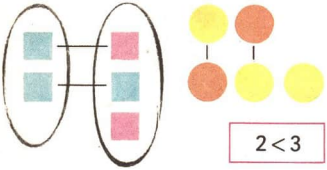

5
5 5

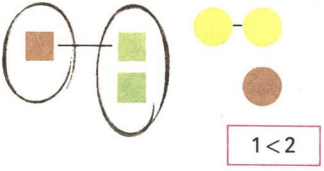
5

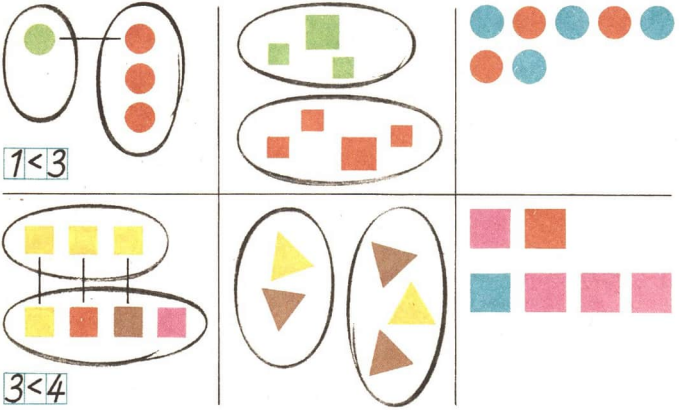


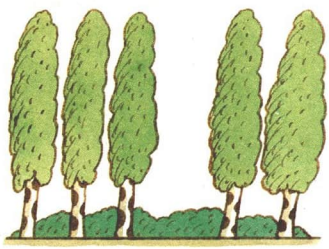
„ist kleiner als", „ist größer als", „ist gleich"

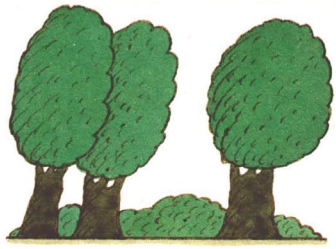


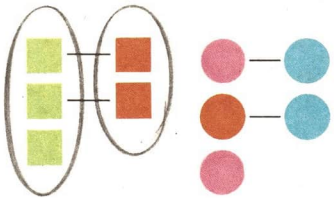




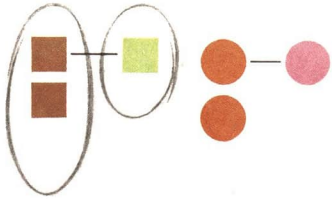






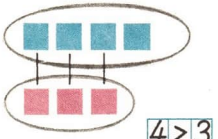


3 > 2

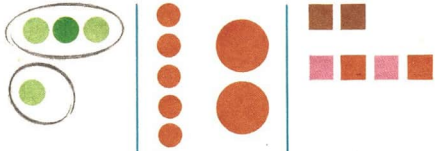


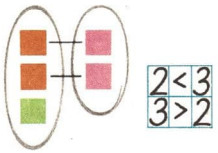
2 > 1

> Das ist das Zeichen für „ist größer als".

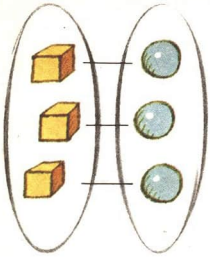


4 > 3

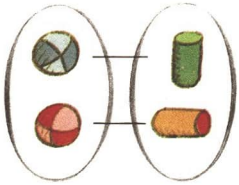




2 < 3
3 > 2



3 = 3



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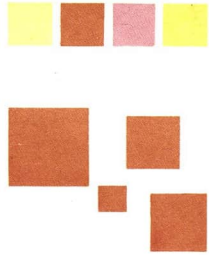

4 = 4

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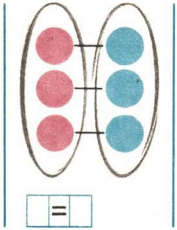

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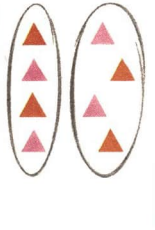
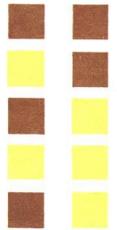
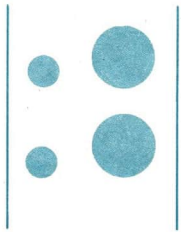
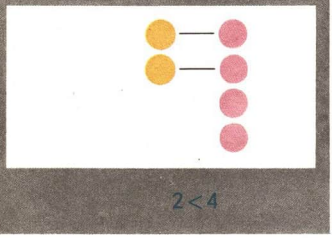






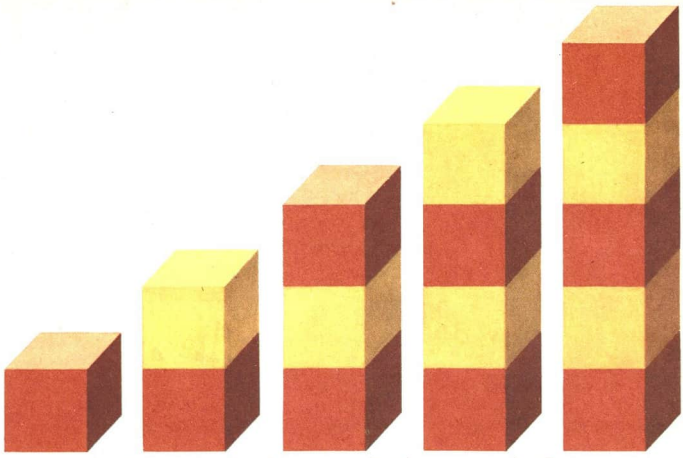
Vergleiche 2 mit 4!



2 < 4

4	3
5	5
3	5
2	2
5	1

2	3
4	2
2	5
1	1
3	4



1 < 2; 2 < 3; 3 < 4; 4 < 5

1 , 2 , 3 , 4 , 5 , ... Die Zahlen sind der Größe nach geordnet.

1 = 1
1 < 2
1 < 3
1 < 4
1 < 5

①

2	1
2	2
2	3
2	4
2	5

②

3	1
3	2
3	3
3	4
3	5

③

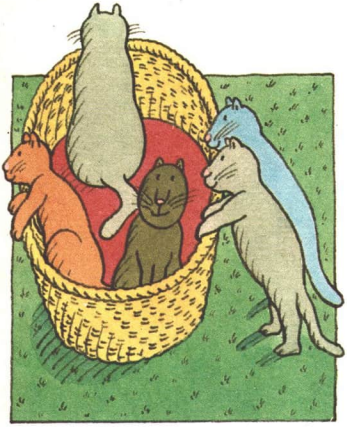
4	1
4	2
4	3
4	4
4	5

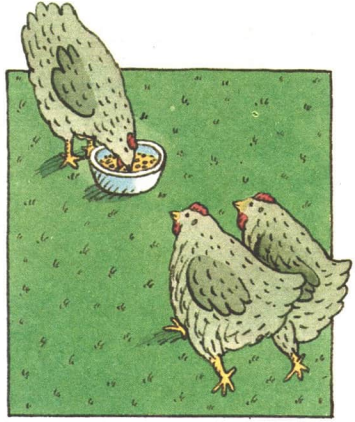
④

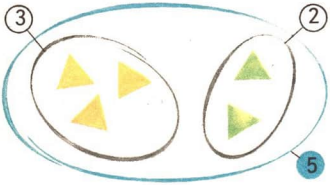
5	1
5	2
5	3
5	4
5	5

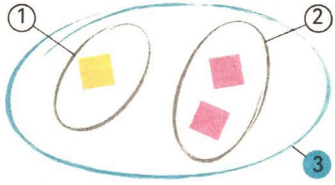
1, 2 , 3 , 4 , 5, ...

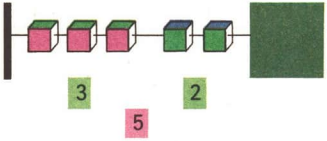
Der Nachfolger von 3 ist 4. Der Vorgänger von 3 ist 2.



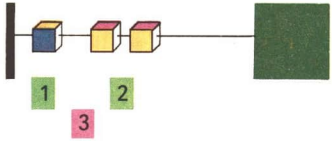






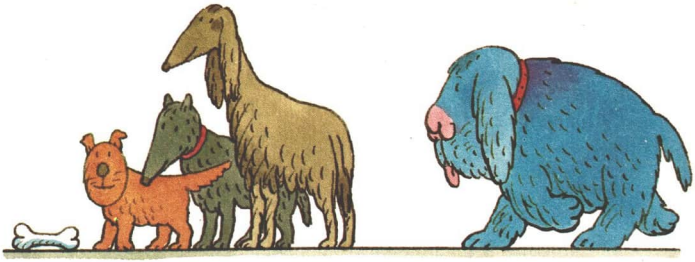


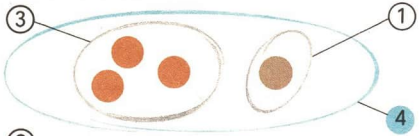
$3 + 2 = 5$



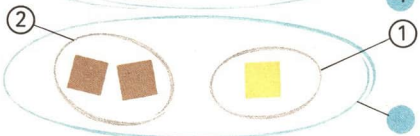
$1 + 2 = 3$

Das ist das Zeichen für „plus“.

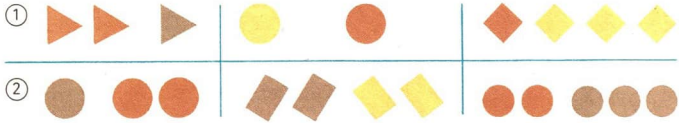


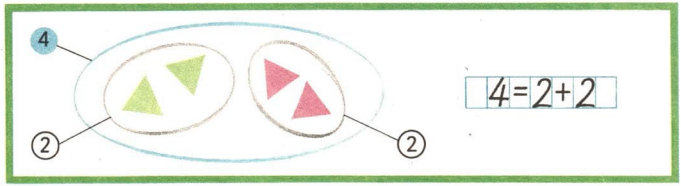


3+1=4



2+1

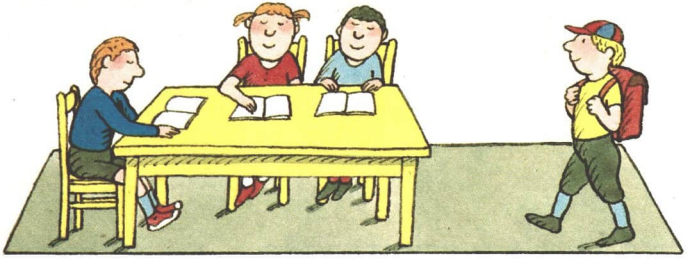




4=2+2

3=2+1

4



3 1

4

3+1=4 4=3+1

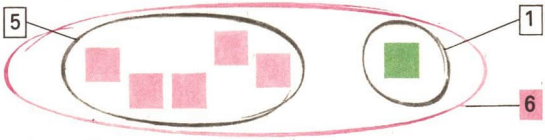
2+3=5 5=2+3

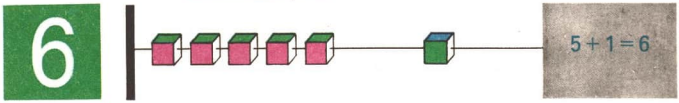
3 + 2 = 5
5 = 3 + 2

①

②

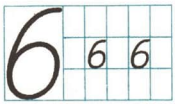
③

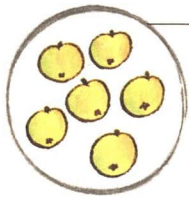


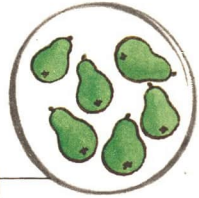


5 + 1 = 6 Der Nachfolger von 5 ist 6.

1 , 2 , 3 , 4 , 5 , 6 , ...

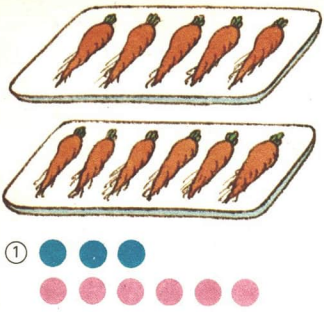


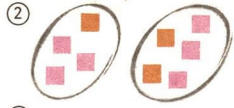


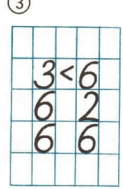
① 

②

③

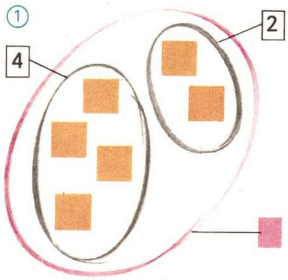


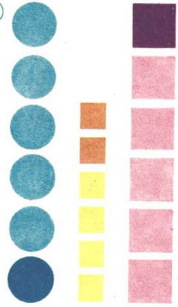




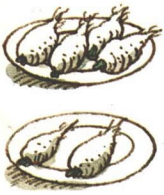
④

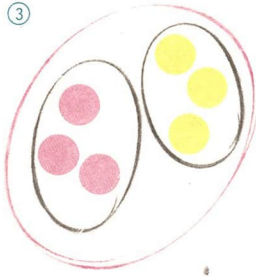
1	6
4	6
6	3

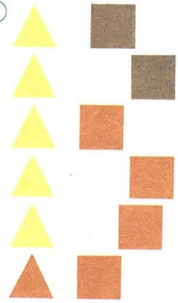




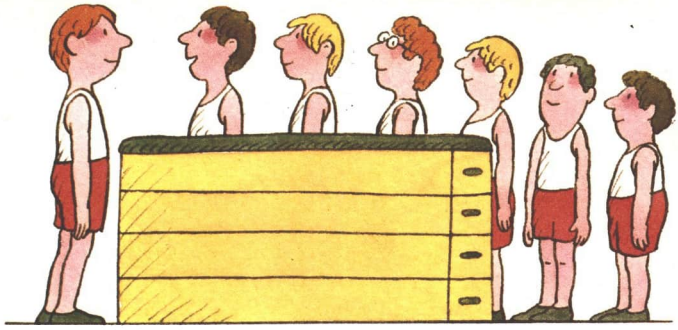
3+3=6



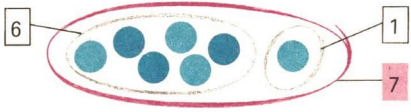


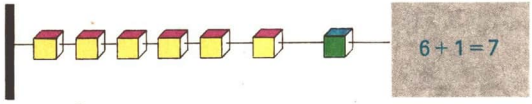


6=4+2



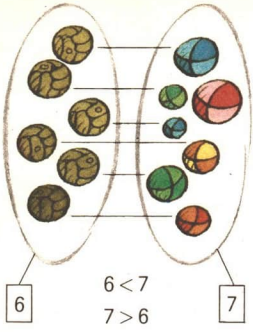
7

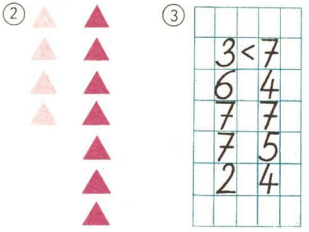




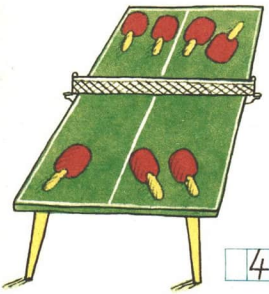
$6 + 1 = 7$ Der Nachfolger von 6 ist 7.

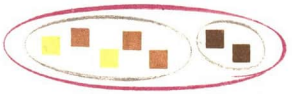
1, 2, 3, 4, 5, 6, 7, ...

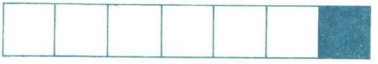




5	2
7	6
4	7
1	6
5	5

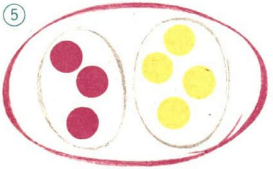




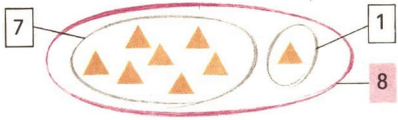


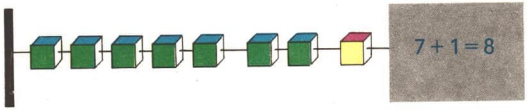
4+3=7

7=5+2



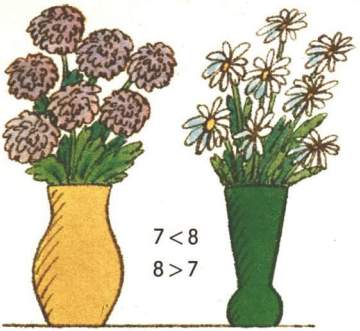
8





$7 + 1 = 8$ ·Der Nachfolger von 7 ist 8.

1, 2, 3, 4, 5, 6, 7, 8, ...



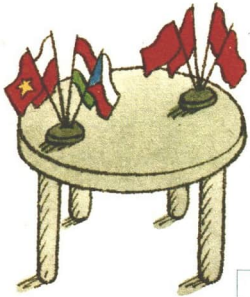
$7 < 8$

$8 > 7$

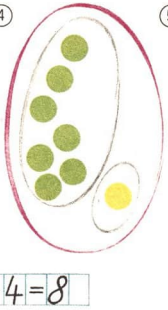
①

② 3 8
7 6
8 5
4 8

③ 5 6
8 8
2 8
5 3

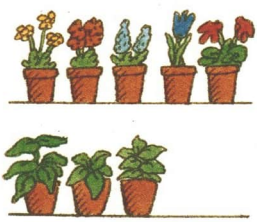


④



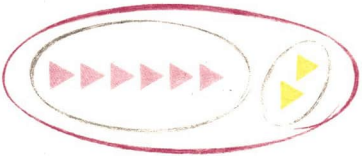
$4+4=8$

⑤



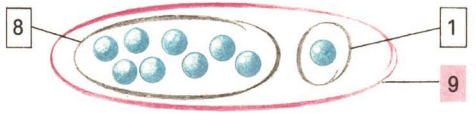
$8=5+3$

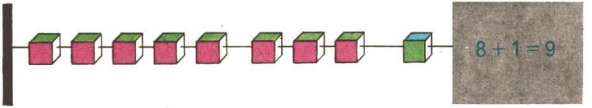
⑥



⑦

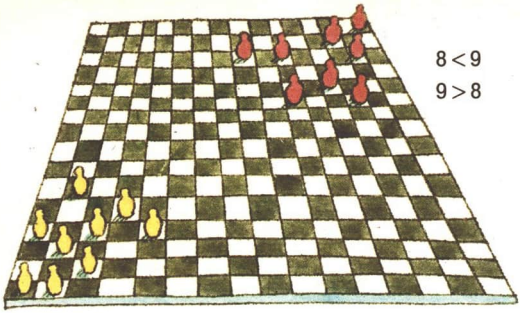
9





$8 + 1 = 9$ Der Nachfolger von 8 ist 9.

1, 2, 3, 4, 5, 6, 7, 8, 9, ...



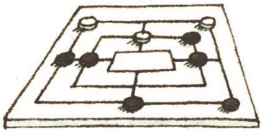
$8 < 9$

$9 > 8$

② 4 9
9 7
6 9
9 9

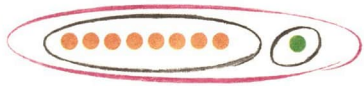
③ 5 9
7 4
3 8
9 1

①

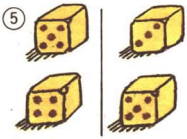


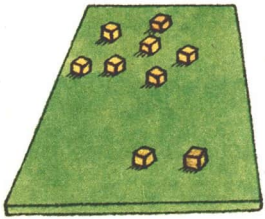
$6 + 3 = 9$

④



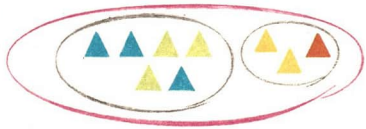
⑤



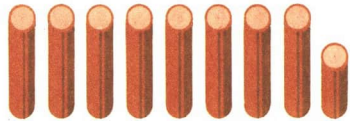


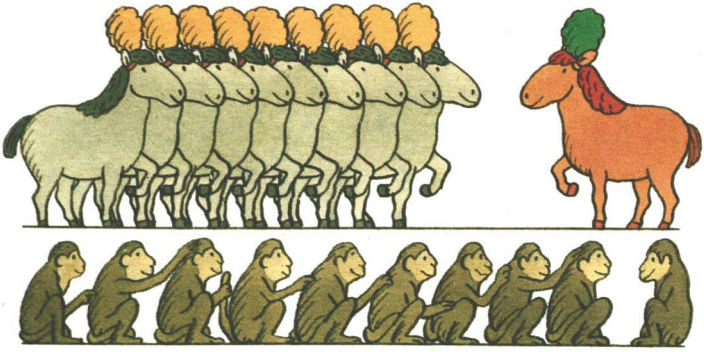
$9 = 7 + 2$

⑥

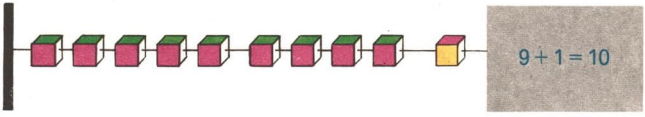


⑦



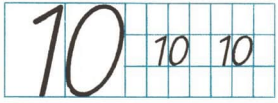


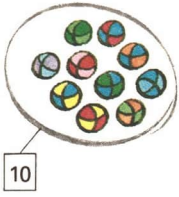
10

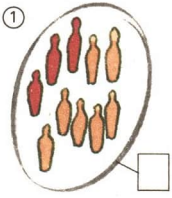


$9 + 1 = 10$ Der Nachfolger von 9 ist 10.

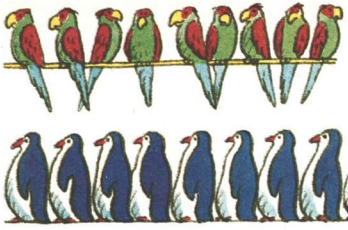
1, 2, 3, 4, 5, 6, 7, 8, 9, 10





① 

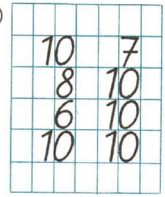
②



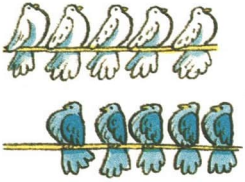
$9 < 10$

$10 > 9$

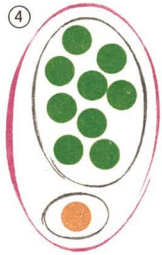
①

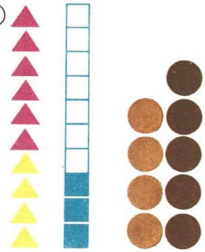
② 

③ 4 8
7 10
10 5
7 9

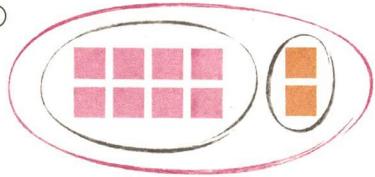


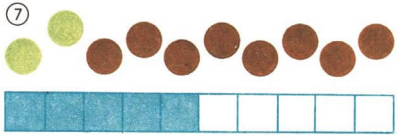
5+5=10

④ 

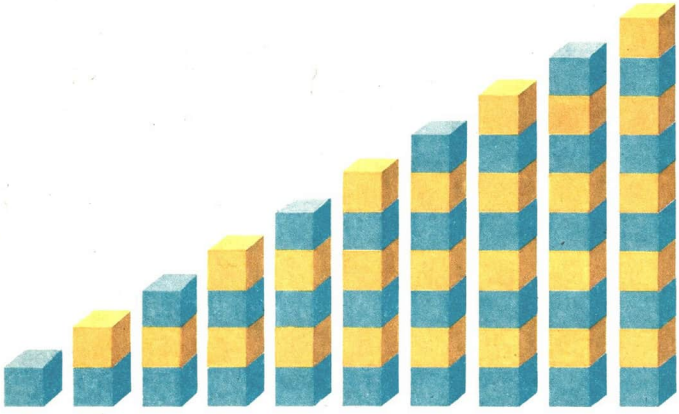
⑤ 

10=6+4

⑥ 

⑦ 

Die Ordnung der Zahlen von 1 bis 10

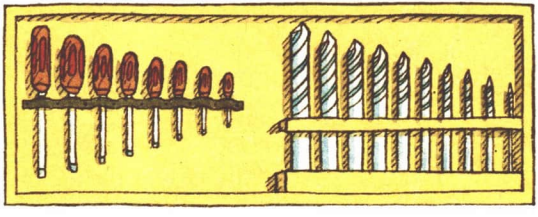


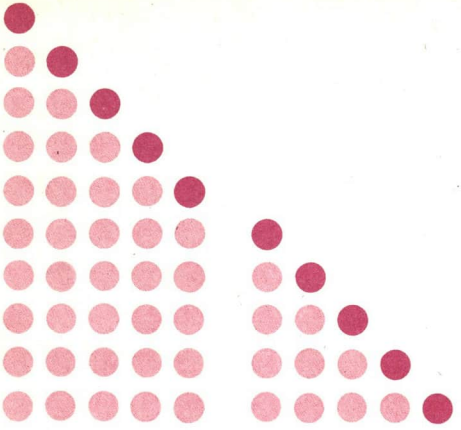
1 < 2 2 < 3 3 < 4 4 < 5 5 < 6 6 < 7 7 < 8 8 < 9 9 < 10

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, ...

2 < 5

①			②			③			④	
2	8		9	5		4	2		1	7
4	3		1	4		1	3		4	4
6	2		3	3		4	8		2	9
5	2		10	4		10	2		8	9





1

$1 + 1 = 2$

$2 + 1 = 3$

$3 + 1$

$4 + 1$

$5 + 1$

$6 + 1$

$7 + 1$

$8 + 1$

$9 + 1$

1	2	3	4	5	6	7	8	9	10

Der Vorgänger von 7 ist 6.

Der Nachfolger von 6 ist 7.

① 4

② 8

③ 2 8

④ 4 10

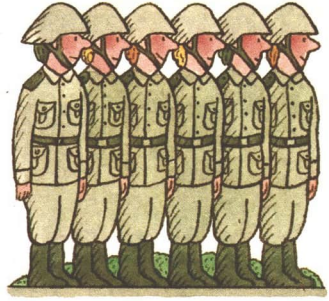
⑤ 3 7

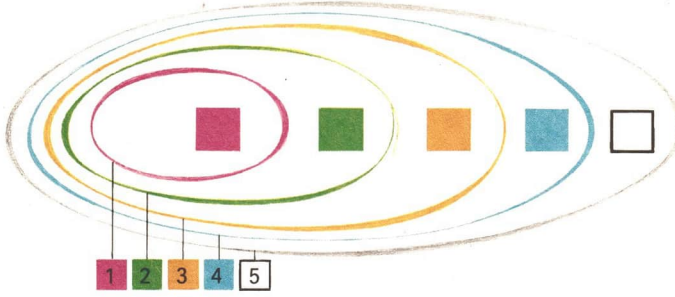
⑥ 2 9

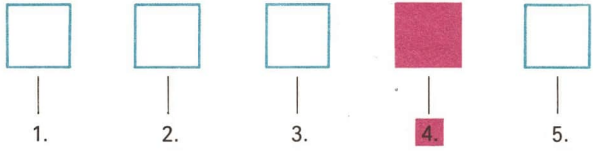
⑦ 1 6 9

⑧ 3 6 9

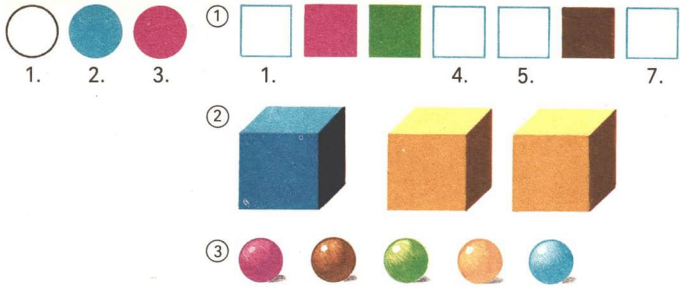
⑨ 2 6 10



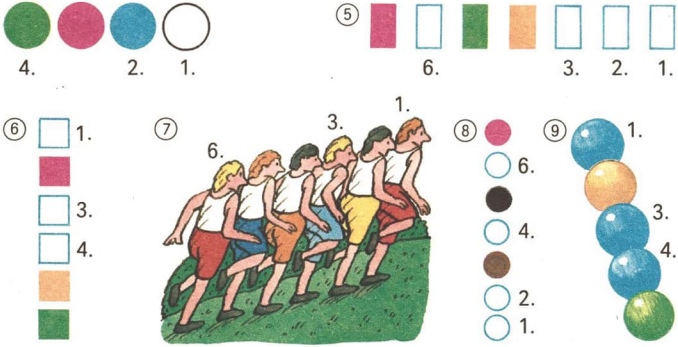




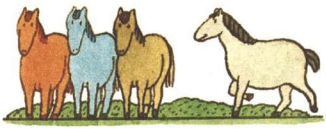
Der erste Ball ist rot.
Der dritte Ball ist blau.

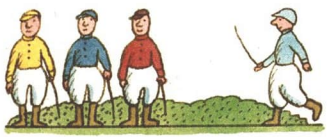

1. 2. 3.
①
1. 4. 5. 7.
②
③

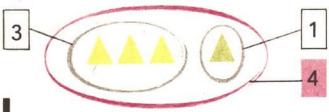
④

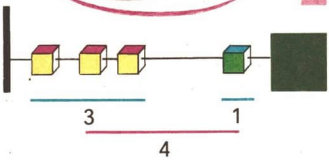

4. 2. 1.
⑤
6. 3. 2. 1.
⑥
1.
3.
4.
⑦
1.
3.
6.
⑧
6.
4.
2.
1.
⑨
1.
3.
4.

Addieren

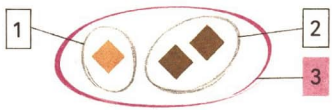


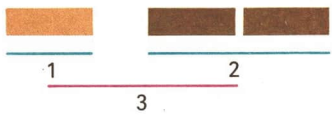






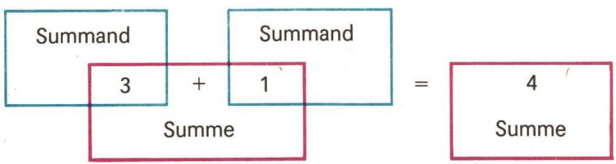
3 + 1 = 4

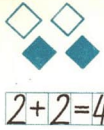




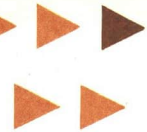
1 + 2 = 3

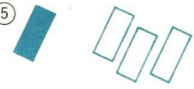
3 + 1 = 4 ist eine Gleichung.

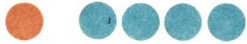


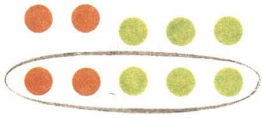


2+2=4





1+4  1+4=5

Rechne!	2 + 3
	 5 2 + 3 = 5
Merke!	2 + 3 = 5

① 1 + 1
2 + 1
3 + 1

② 2 + 2
1 + 4
2 + 3

③ 3 + 1
1 + 2
4 + 1

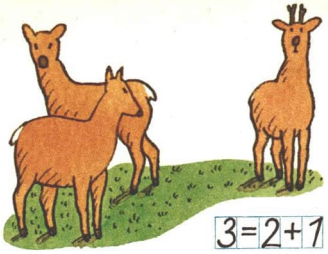
④ 1 + 1 | 1 + 3 | 3 + 2 | 2 + 1 | 2 + 3

1+1=2	1+2=3 2+1=3	1+3=4 2+2=4 3+1=4	1+4=5 2+3=5 3+2=5 4+1=5

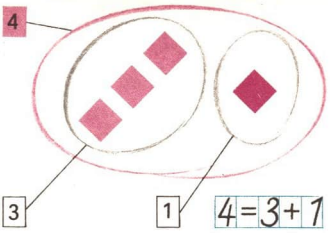
⑤ 1 + 1
2 + 1
3 + 1
4 + 1

⑥ 1 + 2
2 + 2
3 + 2

⑦ 1 + 3 1 + 4
2 + 3



3=2+1



4=3+1

3=1+2

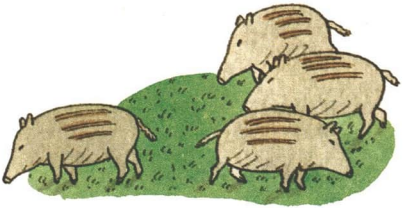
①

②

③

④

1+3=4 | 4=1+3

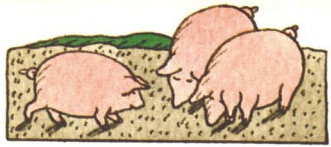


⑤

⑥

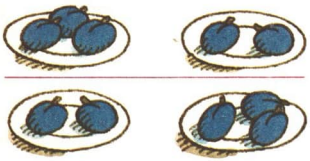
⑦

⑧

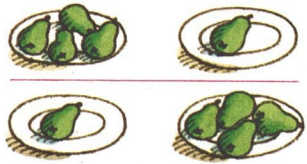


$2+1=3$ $\quad 2+1=1+2$ $\quad 1+2=3$

$3+1=4$ $\quad 3+1=1+3$ $\quad 1+3=4$



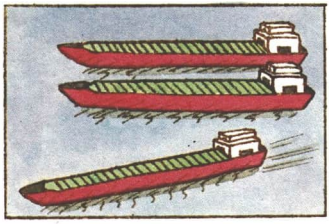
$3+2=5$
$2+3=5$

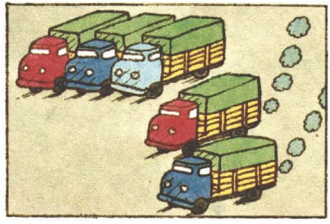


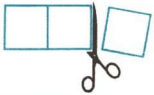
$4+1=5$
$1+4=5$

Summanden kann man vertauschen; die Summe ist gleich.

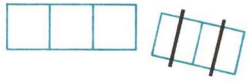
① 2 + 1 1 + 2	② 4 + 1 1 + 4	③ 3 + 1 1 + 3	④ 2 + 3 3 + 2
⑤ 1 + 1 2 + 1 3 + 1 4 + 1	⑥ 2 + 2 3 + 2	⑦ 1 + 1 1 + 2 1 + 3 1 + 4	⑧ 2 + 2 2 + 3







3 − 1 = 2



5 − 2 = 3

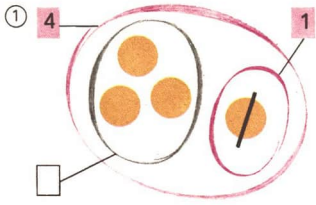
3 − 1 = 2 5 − 2 = 3

Das sind Gleichungen.

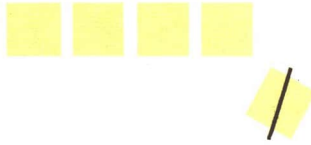
— Das ist das Zeichen für „minus".

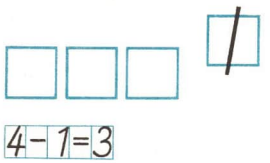
3 − 1	=	2
Differenz		Differenz

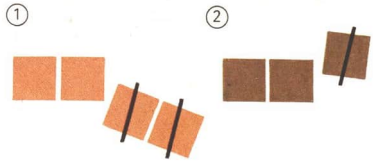
① 4 1



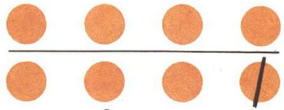
②







3 − 2 = 1

Rechne!	4 − 1
	 3 4 − 1 = 3
Merke!	4 − 1 = 3

① 3 − 2
4 − 1
5 − 2

② 2 − 1
4 − 2
5 − 3

③ 5 − 1
4 − 3
3 − 1

④ 3 − 2 | 4 − 2 | 5 − 2 | 3 − 1

2 − 1 = 1	3 − 1 = 2 3 − 2 = 1	4 − 1 = 3 4 − 2 = 2 4 − 3 = 1	5 − 1 = 4 5 − 2 = 3 5 − 3 = 2 5 − 4 = 1

⑤ 2 − 1
3 − 1
4 − 1
5 − 1

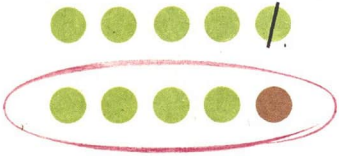
⑥
3 − 2
4 − 2
5 − 2

⑦
4 − 3
5 − 3
5 − 4

Addieren und Subtrahieren

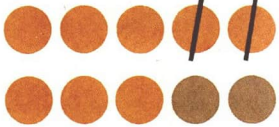
$3 - 1 = 2$

$2 + 1 = 3$



$5 - 1 = 4$

$4 + 1 = 5$

① 

②

$4 - 2 = 2$

$2 + 2 = 4$

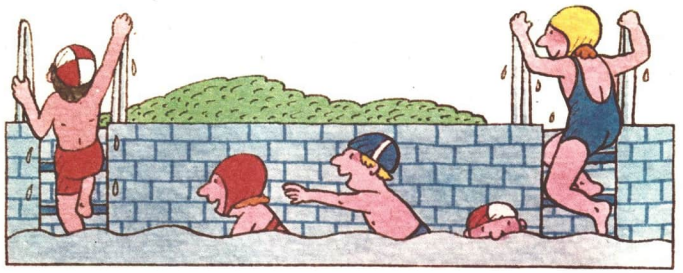
③

④

$4 - 1 = 3$
$3 + 1 = 4$

① $3 - 1$ $2 - 1$
$2 + 1$ $1 + 1$

② $4 - 3$ $5 - 4$
$3 + 1$ $4 + 1$

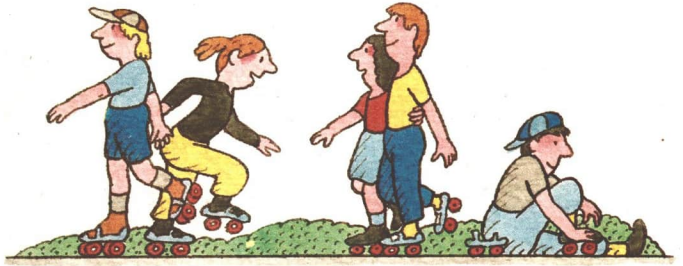


$5 - 2 = 3$
$3 + 2 = 5$

③ $2 - 1$
$5 - 4$
$3 - 2$

④ $4 - 3$
$5 - 4$
$5 - 3$

⑤ $5 - 3$
$5 - 1$
$4 - 1$



$3 < 10$
$5 = 5$
$8 > 6$

⑥ 10 5
10 6
10 2

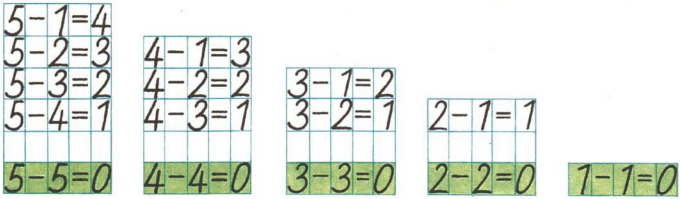
⑦ 3 10
4 10
7 10

⑧ 6 2
4 4
7 9

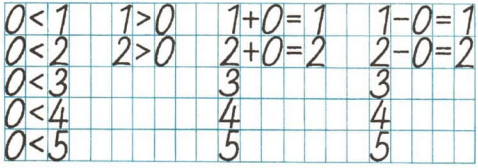
⑨ 9 10
8 2
8 8

$2 + 3 = 5$
$3 + 2 = 5$

⑩ $1 + 2$ | $1 + 4$ | $3 + 1$ |



0



0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

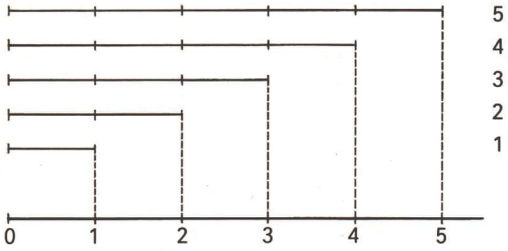
① 0<2

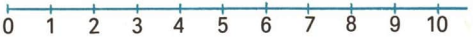
0 5 3 0 1 0 0 4

0+1=1	0+2=2	0+3=3	0+4=4	0+5=5
1+0=1	1+1=2	1+2=3	1+3=4	1+4=5
	2+0=2	2+1=3	2+2=4	2+3=5
		3+0=3	3+1=4	3+2=5
			4+0=4	4+1=5
				5+0=5

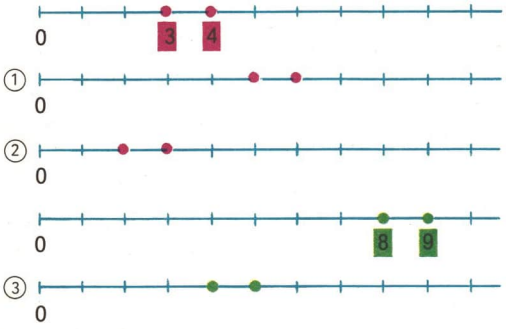
1−0=1	2−0=2	3−0=3	4−0=4	5−0=5
1−1=0	2−1=1	3−1=2	4−1=3	5−1=4
	2−2=0	3−2=1	4−2=2	5−2=3
		3−3=0	4−3=1	5−3=2
			4−4=0	5−4=1
				5−5=0

② 1 + 0 0 + 3 4 + 0 0 + 5 0 + 2 0 + 0





Das ist ein Zahlenstrahl.



3<4

9>8

④ 2 3 / 1 2 | ⑤ 7 8 / 9 10 | ⑥ 4 3 / 1 0 | ⑦ 9 8 / 6 5 | ⑧ 3 4 / 8 7

⑨ 0<1 , 1<2 , ... , 9<10

⑩ 10>9 , 9>8 , ... , 1> 0

$4+2=6$

$2+4=6$

$3+3=6$

$4+2$

$4+2=6$

$2+4=6$

$3+3$

$5+1$

$1+5$

$6+0$

$0+6$

6

$4+2$ $3+3$	$2+4$	$5+1$ $1+5$	$6+0$ $0+6$

①	②	③	④	⑤
$4+2$	$0+4$	$1+5$	$4+1$	$0+6$
$1+3$	$5+1$	$2+3$	$0+3$	$1+1$
$5+0$	$1+4$	$3+1$	$2+2$	$2+1$
$3+3$	$3+2$	$3+0$	$6+0$	$2+4$

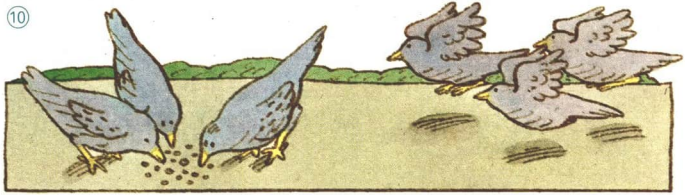
---

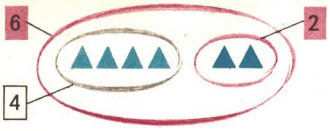
①	②	③	④	⑤	⑥
$1+0$	$2+1$	$2+2$	$1+3$	$0+4$	$0+5$
$4+0$	$3+1$	$3+2$	$2+3$	$1+4$	$1+5$
$6+0$	$5+1$	$4+2$	$3+3$	$2+4$	$0+6$

---

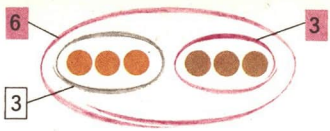
⑦		⑧		⑨	
$4+2$	$3+1$	$5+1$	$2+1$	$4+1$	$3+2$
$2+4$	$1+3$	$1+5$	$1+2$	$1+4$	$2+3$

⑩





$6-2=4$



$6-3=3$

$6-2$

$6-2=4$

$6-4=2$

$6-3$

$6-1$ $6-0$

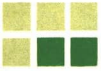
$6-5$

$6-6$

$6-2$ $6-3$	$6-4$	$6-1$ $6-5$	$6-0$ $6-6$

① $6-0$
$6-1$
$6-2$
$6-3$
$6-4$
$6-5$
$6-6$

$6-2$



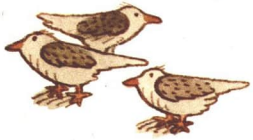
$6-2=4$
$4+2=6$

$6-2=4$

$4+2=6$

② $6-3$
$6-1$
$6-5$
$6-4$
$6-6$

③ $4-3$
$2-1$
$6-0$
$5-3$
$6-2$



$\frac{6-4}{4+2=6}$

oder

$\frac{2+4=6}{6-4=2}$

$6-4=2$

④ $6-1$
$3-2$
$5-2$
$6-4$
$4-2$

⑤ $3-1$
$6-3$
$5-4$
$4-1$
$6-6$

⑥ $6-1$
$6-5$

⑦ $6-2$
$6-4$

⑧ $6-3$
$4-2$

⑨ $5-2$
$5-3$

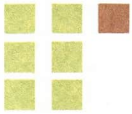
⑩ $3-1$
$3-2$

4 + 3

4 + 3 = 7

3 + 4 = 7

6 + 1



5 + 2

7	5 + 2	2 + 5	6 + 1	1 + 6
	4 + 3	3 + 4	7 + 0	0 + 7

①	②	③	④	⑤
2 + 2	0 + 7	6 + 0	1 + 4	6 + 1
5 + 2	4 + 1	3 + 4	7 + 0	2 + 3
4 + 0	3 + 2	0 + 5	2 + 5	0 + 6
1 + 3	1 + 6	2 + 4	3 + 3	4 + 3

①

7 = 6 + 1

7 = 5 + 2

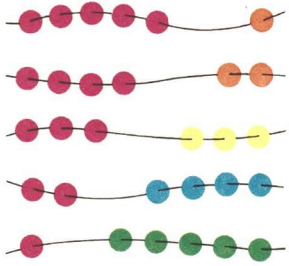
7

7

7

7

②



6 = 5 + 1

6

6

6

6

③ 4 = 0 + 4

4 = 1 + 3

4

4

4

④ 3 = 3 + 0

3

3

3

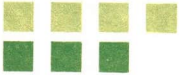
⑤ 2 = 0 + 2

2

2

⑥

7 − 3



7 − 3 = 4

7 − 4 = 3

7 − 1

7 − 2

7 − 2	7 − 5	7 − 1	7 − 6
7 − 3	7 − 4	7 − 0	7 − 7

① 7 − 0
7 − 1
7 − 2
7 − 3
7 − 4
7 − 5
7 − 6
7 − 7

② 7 − 5
5 − 1
2 − 2
7 − 7

③ 4 − 3
7 − 3
1 − 0
2 − 0

④ 7 − 1
3 − 0
5 − 5
7 − 6

⑤ 7 − 2
3 − 3
6 − 2
7 − 0

4 + 3

4 + 3 = 7

4	+	3	= 7
3	+	4	= 7
7	−	3	= 4
7	−	4	= 3

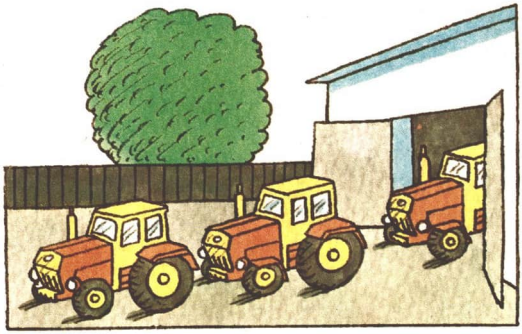
① 6 + 1

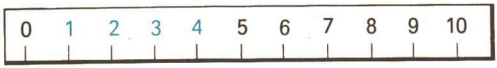
② 4 + 2

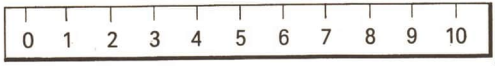
③ 3 + 3 | ④ 2 + 1 | ⑤ 3 + 2 | ⑥ 5 + 1 | ⑦ 5 + 2

⑧

3 +	2
3 +	4
3 +	1
3 +	3
3 +	a







$3+1$ $3+4$ $3+3$ $3+2$

Wenn $a=2$, so $3+a=5$
Wenn $a=4$, so $3+a=7$
Wenn $a=1$, so $3+a=4$

$2+a$; $a=3$, $2+a=5$
$a=4$, $2+a=6$

$2+a$; $a=1, 2$ $\quad 2+a=3$ $\quad 2+a=4$

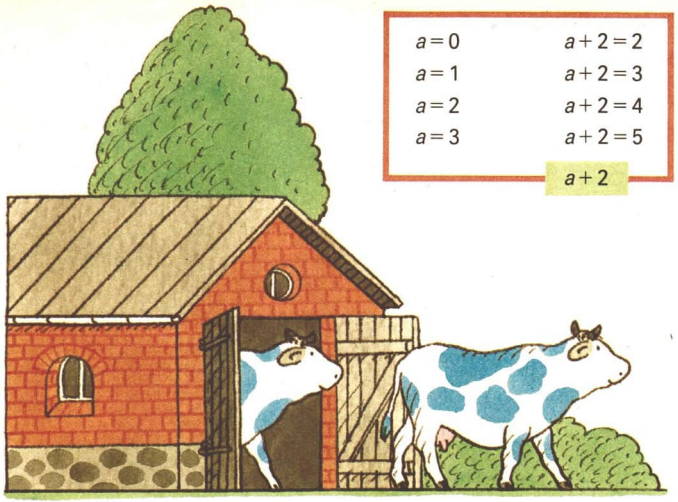
---

① $2+a$; $a=4$
$1+e$; $e=3$
$3+i$; $i=1$

② $3+a$; $a=1$
$5+e$; $e=2$
$2+i$; $i=4$

③ $2+a$; $a=0, 4, 5$

④ $3+a$; $a=1, 4, 2$



$a=0$	$a+2=2$
$a=1$	$a+2=3$
$a=2$	$a+2=4$
$a=3$	$a+2=5$

$a+2$

---

① $a + 3$; $a = 1, 3, 2$ ② $a + 4$; $a = 1, 3, 0$ ③ $a + 1$; $a = 0, 1, 5$

$a-2$	
$a=7$	$a-2=5$
$a=6$	$a-2=4$
$a=5$	$a-2=3$
$a=4$	$a-2=2$

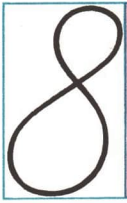
④ $a - 3$; $a = 5, 4, 7$
⑤ $a - 1$; $a = 1, 2, 3$
⑥ $a - 5$; $a = 6, 7, 5$

$7-a$	
$a=2$	$7-a=5$
$a=3$	$7-a=4$
$a=4$	$7-a=3$
$a=5$	$7-a=2$

⑦ $5 - a$; $a = 3, 1, 4$
⑧ $6 - a$; $a = 4, 6, 2$
⑨ $4 - a$; $a = 2, 0, 3$

6 + 2 | 4 + 4 | 5 + 3

6 + 2 = 8
2 + 6 = 8
8 − 2 = 6
8 − 6 = 2



6 + 2	2 + 6
5 + 3	3 + 5
4 + 4	
7 + 1	1 + 7
8 + 0	0 + 8

8 − 2	8 − 6
8 − 3	8 − 5
8 − 4	
8 − 1	8 − 7
8 − 0	8 − 8

①	②	③	④	⑤
2 + 5	4 + 3	5 + 2	0 + 3	1 + 7
5 + 3	0 + 5	4 + 4	3 + 4	0 + 0
1 + 4	2 + 6	1 + 1	7 + 1	0 + 7
8 + 0	7 + 0	0 + 8	3 + 5	6 + 2

⑥	⑦	⑧	⑨	⑩
8 − 8	5 − 4	8 − 3	8 − 4	0 − 0
4 − 2	7 − 3	8 − 0	4 − 4	8 − 7
5 − 5	8 − 5	7 − 7	8 − 2	8 − 6
8 − 1	7 − 0	7 − 5	5 − 0	7 − 4

①	②	③	④	⑤
5 + 3	6 + 1	4 + 3	6 + 2	3 + 2
3 + 5				
8 − 3				
8 − 5				

① $3+3$, $8-5$, $8+0$, $6-6$

② $7-4$, $4+4$, $8-3$, $0+6$

③ $5+3$, $2+5$, $8-1$, $5-4$

④ $7-7$, $8-6$, $0+5$, $2+6$

⑤ $6-0$, $7+1$, $5+2$, $8-2$

---

⑥ $2+2$, $5+2$, $1+2$, $6+2$

⑦ $6-2$, $2-2$, $5-2$, $8-2$

⑧ $1+1$, $2+2$, $3+3$, $4+4$

⑨ $4+1$, $4+2$, $4+3$, $4+4$

⑩ $8-1$, $8-2$, $8-3$, $8-4$

---

① ○○○○○ ○○● $8=7+1$

○○○○○ ○●● $8=6+2$

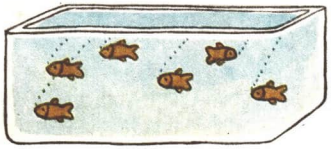
○○○○○ ●●● 8

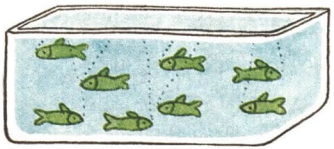
○○○○● ●●● 8

○○○●● ●●● 8

○○●●● ●●● 8

○●●●● ●●● 8





$6<8$; $6+2=8$

$4<7$; $4+3=7$

$3<6$; $3+3=6$

$8>6$; $6+2=8$

$7>4$; $4+3=7$

$6>3$; $3+3=6$

② 5 8 / 2 4 / 3 7

③ 2 5 / 1 7 / 4 6

④ 3 8 / 0 3 / 4 8

⑤ 8 5 / 4 2 / 7 3

⑥ 5 0 / 7 1 / 6 4

⑦ 8 3 / 3 1 / 8 4

---

⑧ $a+5$; $a=1, 0, 3$

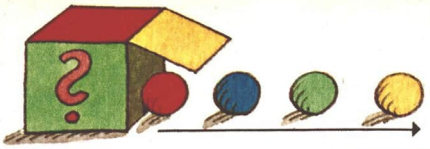
$a+4$; $a=3, 4, 2$

$a+6$; $a=2, 0, 1$

⑨ $8-a$; $a=2, 7, 5$

$5-a$; $a=1, 5, 0$

$7-a$; $a=6, 3, 4$



$e+4$

Wenn $e=3$, so $e+4=7$
Wenn $e=1$, so $e+4=5$
Wenn $e=4$, so $e+4=8$
Wenn $e=2$, so $e+4=6$

e	$e+4$
3	7
1	5
4	8
2	6

$i-4$

Wenn $i=8$, so $i-4=4$
Wenn $i=5$, so $i-4=1$
Wenn $i=6$, so $i-4=2$
Wenn $i=4$, so $i-4=0$

i	$i-4$
8	4
5	1
6	2
4	0

a	$a+3$
3	6
2	5
0	3
1	4
4	7

①

e	$e+2$
3	
4	
1	
0	
5	

②

i	$i+1$
6	
1	
5	
3	
2	

③

u	$u+3$
1	
2	
0	
4	
5	

a	$a-3$
8	5
2	–
3	0
1	–
5	2

④

a	$a-4$
6	
4	
7	
5	
8	

⑤

e	$e-2$
7	
1	
5	
0	
3	

⑥

a	$7-a$
5	
2	
8	
7	
3	

$3 + a = 5$

$a = 2$

$5 + a = 7$

$a = 2$

$5 - i = 3$

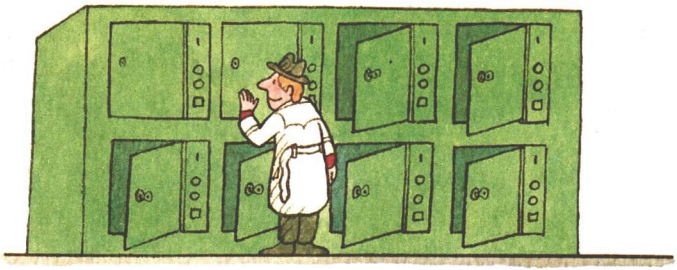
$i = 2$

① $3 + i = 6$
$2 + e = 3$
$5 + a = 8$
$1 + i = 2$
$6 + e = 8$

② $7 - a = 5$
$8 - e = 6$
$4 - i = 1$
$5 - a = 0$
$8 - e = 8$

③ $7 + e = 8$
$4 + a = 6$
$5 + e = 8$
$2 + i = 6$
$2 + a = 7$

④ $8 - i = 4$
$6 - a = 2$
$7 - e = 3$
$7 - i = 7$
$8 - e = 5$



$a + 5 = 6$

$a = 1$

$e - 5 = 3$

$e = 8$

⑤ $a + 3 = 5$
$e + 1 = 8$
$i + 5 = 6$
$u + 7 = 8$
$a + 2 = 2$

⑥ $e - 3 = 5$
$i - 4 = 2$
$u - 6 = 1$
$a - 2 = 3$
$e - 7 = 1$

⑦ $i + 5 = 7$
$u + 3 = 8$
$a - 1 = 4$
$e - 6 = 2$
$i + 4 = 8$

6 + 3

$\frac{6+3=9}{3+6=9}$

$9-3=6$

$9-6=3$

7 + 2

5 + 4

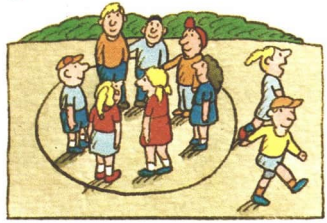
7 + 2	2 + 7
6 + 3	3 + 6
5 + 4	4 + 5
8 + 1	1 + 8
9 + 0	0 + 9

9 − 2	9 − 7
9 − 3	9 − 6
9 − 4	9 − 5
9 − 1	9 − 8
9 − 0	9 − 9

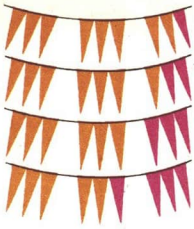
①	②	③	④	⑤	⑥
6 + 2	2 + 5	9 − 4	8 − 4	6 + 3	9 − 5
4 + 5	5 + 4	8 − 8	9 − 0	9 − 6	2 + 7
1 + 2	1 + 8	5 − 4	4 − 3	8 − 7	6 − 6
0 + 9	3 + 4	9 − 1	9 − 8	0 + 8	9 + 0

①

②



③	④	⑤	⑥	⑦	⑧
9 − 3	2 + 6	9 − 7	9 − 5	0 + 6	9 − 4
5 + 3	8 − 1	2 + 7	8 − 5	1 + 6	8 − 4
8 + 1	9 + 0	9 − 2	7 − 5	2 + 6	7 − 4
9 − 9	5 − 5	7 + 2	6 − 5	3 + 6	6 − 4

① 

$9 = 8 + 1$

9

9

9

9

9

9

9

② Summe 9

$5+4=9$

$2+7$

③ Summe 7

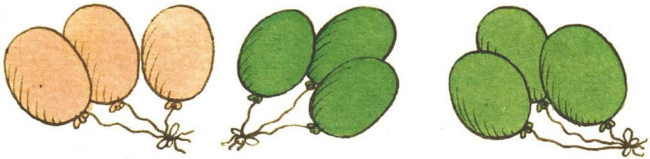
$6+1=7$

④ Summe 8

⑤ Summe 6

⑥ Summe 4

⑦ Summe 5

① 

② $9-6$ $9-4$ $9-7$ $9-9$

③ $9-2$ $9-8$ $9-5$ $9-3$

④ $8+1$ $1+8$ $9-1$ $9-8$

⑤ $5+4$

⑥ $6+3$

⑦

a	$9-a$
3	
7	
9	

⑧

e	$e-5$
9	
6	
8	

⑨ $a+3=5$ $e+4=9$ $i+6=7$ $u+2=9$ $a+1=6$

⑩ $e-3=5$ $i-2=7$ $a-5=2$ $e-9=0$ $u-1=4$

①			②			③			④		
	0	5		6	0		0	7		8	0
	1	5		6	1		1	7		8	1
	2	5		6	2		2	7		8	2
	3	5		6	3		3	7		8	3
	4	5		6	4		4	7		8	4
				6	5		5	7		8	5
							6	7		8	6
										8	7

$0<3$ $4>0$
$1<3$ $4>1$
$2<3$ $4>2$
$4>3$

$4<5$; $6>5$ sind Ungleichungen.

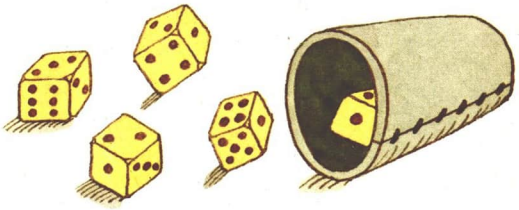
$5<7$; $5+2=7$
$4<5$; $4+1=5$
$6<9$; $6+3=9$

⑤					⑥				
3	8		3	4	2	4		2	9
4	7		2	6	1	6		7	8
5	9		4	8	5	8		6	9

$7>5$; $5+2=7$
$5>4$; $4+1=5$
$9>6$; $6+3=9$

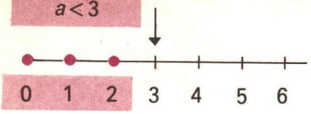
⑦					⑧				
8	3		4	3	7	2		9	5
7	4		8	2	9	8		8	3
9	5		9	7	8	3		9	7

$5+a=9$



①				②				③				④			
3	+	i	= 6	u	−	7	= 2	a	+	6	= 9	5	−	e	= 1
2	+	u	= 5	a	−	9	= 0	a	+	6	= 8	7	−	i	= 0
5	+	a	= 8	e	−	3	= 1	i	+	7	= 9	8	−	u	= 2
1	+	e	= 4	i	−	3	= 6	u	+	6	= 6	9	−	a	= 8
5	+	i	= 9	u	−	2	= 7	a	+	3	= 9	9	−	e	= 4

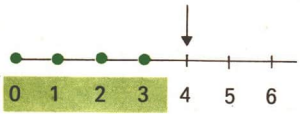
$a < 3$



a			
$a = 0$	1	2	

$4 > a$

$a = 0$	1	2	3

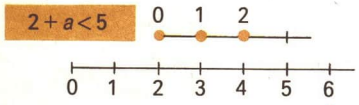


① $a < 2$ $e < 5$ $i < 3$ $u < 4$ $a < 1$

② $4 > e$ $3 > i$ $5 > u$ $1 > a$ $2 > e$

③ $i < 2$ $u < 5$ $3 > a$ $4 > e$ $i < 1$

$2 + a < 5$

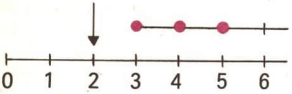


$2 + a < 5$		
	$a = 0$	1 2

④ $2 + e < 5$ $5 + i < 7$ $3 + u < 6$

⑤ $1 + a < 5$ $0 + e < 3$ $4 + i < 8$

$5 - e > 2$		
	$e = 0$	1 2



⑥ $8 - i > 4$ $7 - u > 5$ $6 - a > 3$

⑦ $9 - e > 6$ $8 - i > 5$ $7 - u > 3$

⑧ $2 + a < 5$ $6 + e < 9$ $9 - i > 7$

⑨ $6 - i > 3$ $8 - u > 6$ $3 + a < 6$

$4 + 3 = 7$
$7 - 2 = 5$
$6 - 3 = 3$
$5 + 4 = 9$

①			
	7	2	5
	6	2	8
	9	4	5
	3	2	5

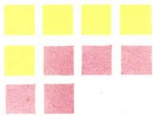
②			
	9	2	7
	1	4	5
	6	4	2
	6	3	9

③			
	4	5	9
	4	4	0
	7	3	4
	7	0	7

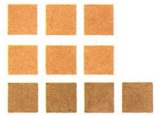
8 + 2

8 + 2 = 10
2 + 8 = 10
10 − 2 = 8
10 − 8 = 2

5 + 5



6 + 4

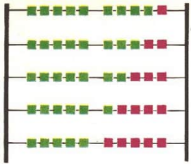


10

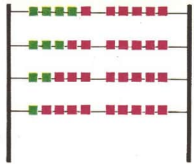
8 + 2	2 + 8	10 − 2	10 − 8
7 + 3	3 + 7	10 − 3	10 − 7
6 + 4	4 + 6	10 − 4	10 − 6
5 + 5		10 − 5	
9 + 1	1 + 9	10 − 1	10 − 9
10 + 0	0 + 10	10 − 0	10 − 10

① 4 + 5	② 5 + 5	③ 5 − 4	④ 3 − 0	⑤ 6 + 4
7 + 3	8 + 0	10 − 5	10 − 9	10 − 7
1 + 9	9 + 1	10 − 8	10 − 1	2 + 8
⑥ 2 − 1	⑦ 9 − 4	⑧ 0 + 9	⑨ 7 + 2	⑩ 1 − 1
10 − 3	10 − 4	8 + 2	5 + 0	4 + 6
7 − 4	8 − 4	7 + 1	3 + 7	10 − 2
10 − 6	4 − 4	5 + 4	2 + 6	1 + 7

① 4 − 2	② 8 − 4	③ 0 + 0	④ 2 + 2	⑤ 4 + 4
6 − 3	10 − 5	1 + 1	3 + 3	5 + 5



$10 = 9 + 1$
10
10
10
10



10
10
10
10

①

---

② $8 = 5 + 3$
8
8
8

③ $9 = 5 + 4$
9
9
9

④ $7 + 3$
$3 + 7$
$10 - 3$
$10 - 7$

⑤ $6 + 4$

⑥ $8 + 2$

⑦

Differenz 2

$5 - 3 = 2$
$10 - 8$

⑧

Differenz 4

$6 - 2 = 4$

⑨

Differenz 1

Differenz 6

⑩

Differenz 3

Differenz 5

① $a < 10$
$i < 8$
$e < 6$
$u < 9$
$e < 1$

② $9 > a$
$5 > u$
$10 > i$
$8 > e$
$1 > a$

③ $6 + a < 8$
$4 + a < 6$
$5 + a < 9$
$7 + a < 10$

④ $9 - e > 6$
$8 - e > 4$
$10 - e > 7$
$7 - e > 3$

⑤

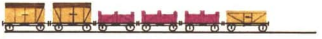
3 Summanden

2 3 1

2+3 1

2 3+1

2+3 + 1



2 + 3+1

2+3+1
2+3 =5
5 +1=6
2+3+1=6

2+3+1
3+1=4
2+ 4 =6
2+3+1=6

Summanden kann man beliebig zusammenfassen.
Die Summe ist gleich.

2+3+1=6

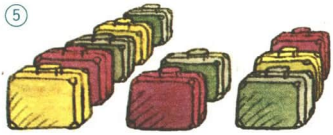
① 2 + 4 + 1 ② 4 + 3 + 2 ③ 2 + 5 + 1
2 + 4 + 1 4 + 3 + 2 2 + 5 + 1

④ 5 + 2 + 2 ⑤ 4 + 3 + 3 ⑥ 5 + 1 + 3 ⑦ 3 + 3 + 3
5 + 2 + 2 4 + 3 + 3 5 + 1 + 3 3 + 3 + 3

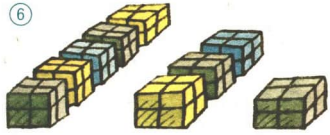
---

① 1 + 1 + 7 ② 5 + 3 + 2 ③ 7 + 1 + 2 ④ 4 + 3 + 1
6 + 2 + 2 3 + 3 + 2 2 + 4 + 4 6 + 1 + 2

⑤



⑥



2 Subtrahenden

$7-2-3$

$7-2=5$
$5-3=2$
$7-2-3=2$

$7-2-3=2$

$2+3=5$
$7-5=2$
$7-2-3=2$

---

① $5-2-1$ $5-3$

② $8-4-2$ $8-6$

③ $10-5-2$ $10-7$

④ $9-3-2$ $9-5$

---

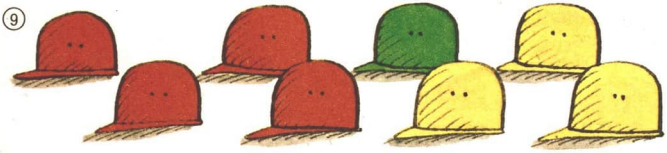
⑤ $5-1-2$
$6-2-2$
$5-3-2$
$6-2-3$
$5-2-2$

⑥ $6-3-3$
$7-3-2$
$8-2-3$
$9-2-1$
$10-3-2$

⑦ $9-4-4$
$7-4-1$
$10-5-3$
$8-4-3$
$10-2-6$

⑧ $10-4-5$
$8-5-1$
$7-5-2$
$9-2-5$
$8-4-4$

⑨



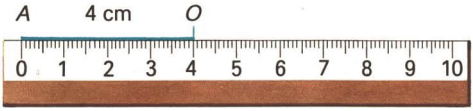
① $5+1+4$
$5+2+1$
$4+2+3$
$7+1+1$
$4+4+2$

② $10-2-5$
$7-1-4$
$9-6-2$
$6-1-2$
$8-2-4$

③ $3+1+1$
$3+2+2$
$3+3+3$
$6+1+1$
$6+2+2$

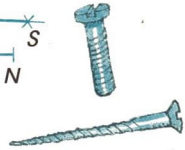
④ $10-1-1$
$10-2-2$
$10-3-3$
$10-4-4$
$10-5-5$

Das Zentimeter



1 cm
ein Zentimeter

① Gib die Länge der Strecken in Zentimeter an!



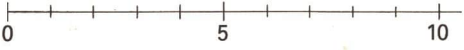
Miß die Länge

② deiner Rechenstäbchen!

③ der auf dieser Seite abgebildeten Gegenstände!

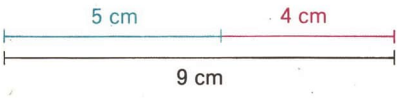
④ Zeige auf dem Zahlenstrahl Strecken folgender Länge!

2 cm | 9 cm | 5 cm | 1 cm | 10 cm | 4 cm

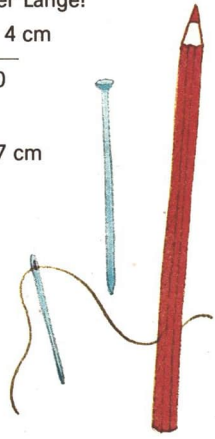


⑤ Zeichne Strecken folgender Länge!

3 cm | 6 cm | 1 cm | 8 cm | 4 cm | 7 cm



5 cm + 4 cm = 9 cm
9 cm − 4 cm = 5 cm
9 cm − 5 cm = 4 cm

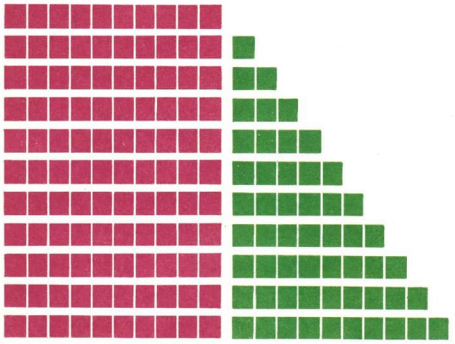


⑥ 4 cm + 3 cm
1 cm + 8 cm

⑦ 7 cm − 6 cm
10 cm − 4 cm

⑧ 7 cm − 2 cm − 4 cm
8 cm − 3 cm − 2 cm

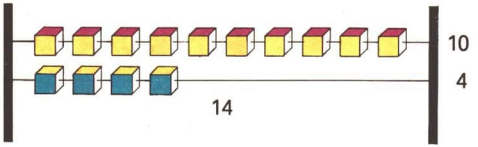
Die Zahlen von 11 bis 20



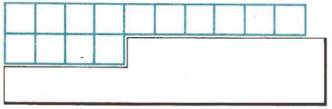
$10 + 0 = 10$
$10 + 1 = 11$
$10 + 2 = 12$
$10 + 3 = 13$

① 10 + 4
10 + 5
10 + 6
10 + 7
10 + 8
10 + 9

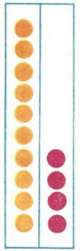
$10 + 10 = 20$

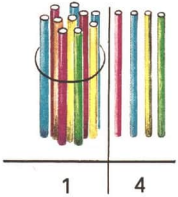


②

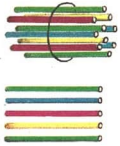
③ 

④

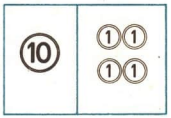
⑦ 



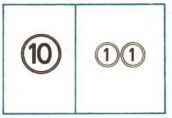
⑤

⑥ 

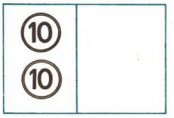
10	1
1	4
1	2
2	0



$10 + 4 = 14$

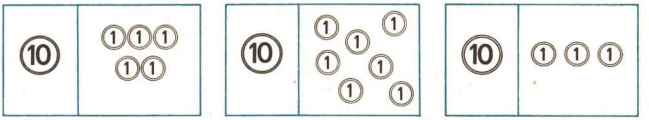


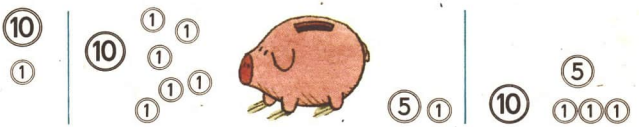
$10 + 2 = 12$



$10 + 10 = 20$

---

① 

② 

Lege mit Rechengeld!

③

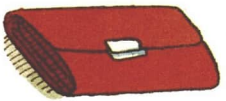
10	1
1	1
1	3
1	6

④ 12	⑤ 14	⑥ 10 + 7	⑦ 10 + 8
15	9	10 + 1	10 + 2
20	18	10 + 4	10 + 6
17	6	10 + 0	10 + 3

Lies und schreibe!

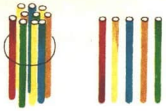
⑧

	11	16	7	14	9	3	10	8	17		
	0	2	18	6	12	20	4	15	19		



⑨ 10 + 10	⑩ 10 + 7	⑪ 10 + 1
10 + 5	10 + 3	10 + 4
10 + 2	10 + 9	10 + 8

$10 + a$



Wenn $a = 5$, so $10 + a = 15$,
denn $10 + 5 = 15$

① $10 + a$

$a = 3$
$a = 7$
$a = 2$
$a = 9$

② $10 + a$

$a = 1$
$a = 10$
$a = 6$
$a = 8$

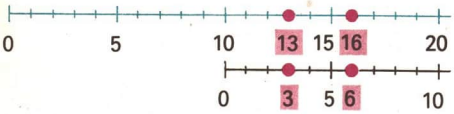
③

a	$10 + a$
6	
4	
2	
8	

④

$10 + a$	a
14	
17	
12	
20	

Die Ordnung der Zahlen 0 bis 20



$13 < 16$,
denn $3 < 6$

$16 > 13$,
denn $6 > 3$

Vergleiche! ① 6 2 / 16 12 ② 3 9 / 13 19 ③ 5 8 / 15 18 ④ 4 1 / 14 11 ⑤ 7 5 / 17 15

⑥ 12 15 / 11 17 | 19 14 / 18 12 ⑦ 16 15 / 14 17 | 13 16 / 19 15 ⑧ 15 20 / 16 11 | 13 18 / 20 17

Ordne! ⑨ 20, 15, 18, 19, 13 ⑩ 12, 19, 16, 17, 11
⑪ 5, 13, 16, 9, 20 ⑫ 10, 8, 14, 11, 9 ⑬ 20, 14, 2, 4, 12

Zähle! ⑭ von 12 bis 18 ⑮ von 6 bis 13
von 20 bis 14 von 14 bis 8

13 ist der Vorgänger von 14.

15 ist der Nachfolger von 14.

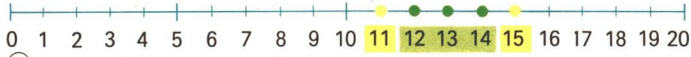
14

13 < 14 14 < 15

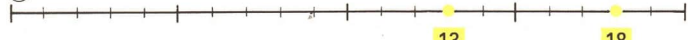
Bestimme bei den folgenden Zahlen den Vorgänger und den Nachfolger!

①	②	③	④	⑤
12	16	19	15	10
17	13	11	18	1

Zwischen 11 und 15 liegen 12, 13, 14.

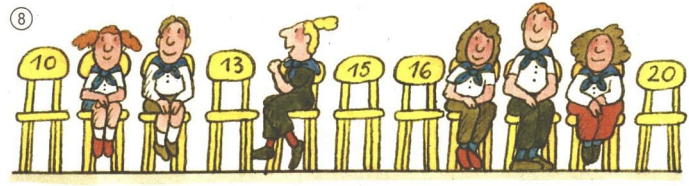


⑥



⑦

⑧



Wiederhole!

⑨	⑩	⑪	⑫
4 + 3	6 − 2	4 + 2 + 1	6 − 3 − 2
6 + 2	8 − 5	2 + 3 + 2	8 − 1 − 4
5 + 4	4 − 3	5 + 1 + 4	9 − 4 − 3
2 + 7	7 − 4	3 + 4 + 2	10 − 2 − 3

Addieren und Subtrahieren von 10 bis 20

13 + 2

3 + 2 = 5

13 + 2 = 15

13 + 2 = 15	
3 + 2 = 5	

① 15 + 3 | 12 + 4 | 11 + 6
5 + 3 | 2 + 4 | 1 + 6

② 12 + 5
14 + 2
16 + 1
15 + 4

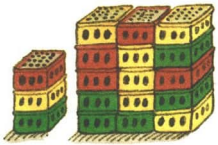
③ 17 + 2
14 + 3
11 + 4
18 + 1

④ 11 + 3
13 + 6
15 + 1
12 + 2

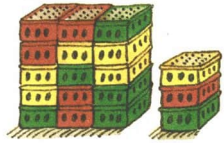
⑤ 13 + 1
14 + 4
16 + 3
11 + 5

⑥ 15 + 2
12 + 6
11 + 9
17 + 1

⑦ 13 + 5
16 + 2
15 + 5
13 + 2



3 + 15 = 18	
15 + 3 = 18	



⑧ 4 + 12
12 + 4

2 + 13
13 + 2

5 + 14
14 + 5

⑨ 3 + 12
5 + 11
1 + 18
4 + 15

⑩ 4 + 13
3 + 15
2 + 12
5 + 15

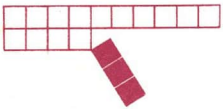
5 – 2 = 3

15 – 2 = 13

15 – 2 = 13	
5 – 2 = 3	

① 17 – 3 | 19 – 5 | ② 14 – 3 | 20 – 6
7 – 3 | 9 – 5 | 4 – 3 | 10 – 6

③	④	⑤	⑥	⑦	⑧
19 – 4	15 – 3	17 – 4	18 – 3	12 – 1	17 – 6
13 – 2	18 – 6	14 – 2	19 – 7	15 – 2	18 – 7
17 – 5	13 – 1	18 – 5	17 – 2	18 – 4	20 – 3
15 – 1	19 – 6	15 – 4	16 – 3	20 – 5	14 – 1
16 – 5	16 – 2	19 – 3	20 – 4	19 – 2	20 – 8



17 – 3 = 14
14 + 3 = 17

⑨ 16 – 4 | 13 – 2
12 + 4 | 11 + 2

⑩ 18 – 5 | 20 – 4
13 + 5 | 16 + 4

⑪	⑫	⑬	⑭
19 – 2	16 – 3	12 + 4	15 – 3
15 – 4	10 – 5	17 + 2	14 + 2
18 – 3	15 – 2	13 + 5	19 – 4
16 – 5	18 – 6	15 + 3	16 + 3
14 – 2	20 – 5	14 + 6	18 – 4
17 – 4	17 – 6	11 + 5	12 + 5

①

a	$a + 3$
11	
14	
16	
12	
15	

②

e	$e - 5$
18	
16	
19	
17	
20	

③

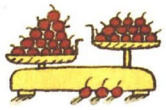
i	$10 - i$
4	
7	
2	
6	
9	

④

i	$20 - i$
4	
7	
2	
6	
9	

$12 + x = 15$
$x = 3$

denn $12 + 3 = 15$



⑤ $13 + x = 16$
$14 + x = 18$
$17 + x = 20$
$12 + x = 19$

⑥ $18 - x = 13$
$16 - x = 12$
$19 - x = 11$
$15 - x = 13$

$13 + x < 15$
$x = 0, 1$

denn $13 + 0 < 15$
$13 + 1 < 15$

⑦ $12 + x < 16$
$15 + x < 17$
$14 + x < 15$
$16 + x < 18$

$17 - x > 14$
$x = 0, 1, 2$

denn $17 - 0 > 14$
$17 - 1 > 14$
$17 - 2 > 14$

⑧ $16 - x > 13$
$14 - x > 12$
$18 - x > 15$
$15 - x > 14$

$12 + 4 = 16$
$16 - 4 = 12$
$12 = 16 - 4$
$16 = 12 + 4$

⑨

15	2	13
12	4	16

⑩

14	17	3
18	12	6

$14 < 17$
$14 + 3 = 17$
$19 > 14$
$19 = 14 + 5$

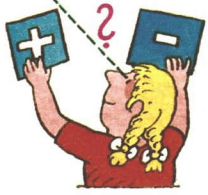
⑪

11	14
13	16
15	12
20	16

⑫

13	19
17	14
12	18
19	15

$16 \square 4 = 12$

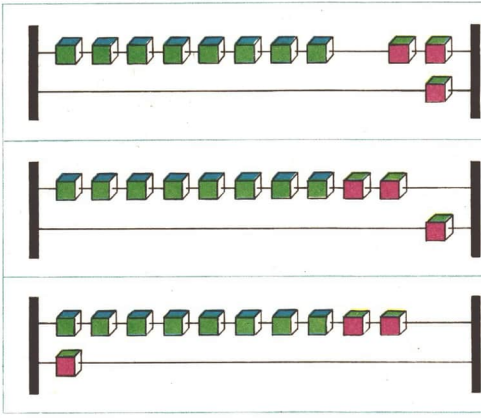


① $8 + x = 10$
$6 + x = 10$
$9 + x = 10$
$5 + x = 10$

② $7 + x = 10$
$2 + x = 10$
$8 + x = 10$
$3 + x = 10$

③ $5 = 4 + 1$
⋮
$3 = 2 + 1$
⋮

④ $4 = 2 + x$
$6 = 2 + x$
$3 = 2 + x$
$5 = 2 + x$



$8 + 3$

$8 + 2 = 10$

1

$10 + 1 = 11$

$8 + 3 = 11$

$8 + 3 = 11$; $3 + 8 = 11$

⑤ $9 + 2$
$2 + 9$
$7 + 4$
$4 + 7$

⑥ $8 + 3$
$3 + 8$
$6 + 5$
$5 + 6$

⑦ $9 + 1$
$7 + 4$
$6 + 2$
$3 + 6$

⑧ $7 + 3$
$4 + 4$
$2 + 7$
$5 + 6$

⑨ $9 + 2$
$3 + 5$
$8 + 3$
$6 + 4$

⑩ $8 + 2$
$4 + 7$
$3 + 3$
$5 + 6$

⑪ $2 + 9$
$8 + 0$
$8 + 3$
$2 + 5$

⑫ $7 + 4$
$3 + 8$
$0 + 9$
$1 + 7$

⑬ $5 + 5$
$9 + 2$
$3 + 6$
$6 + 5$

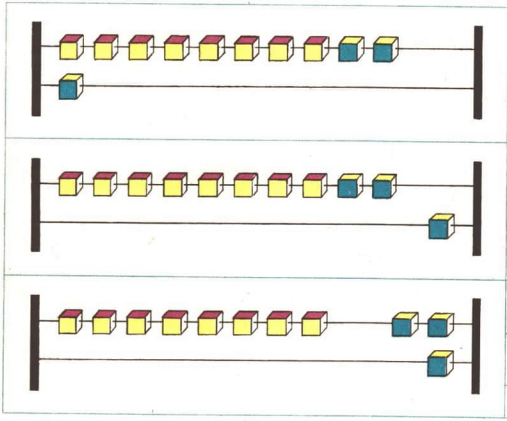
① $11 - x = 10$
$13 - x = 10$
$12 - x = 10$
$14 - x = 10$

② $12 - 2$
$11 - 1$
$15 - 5$
$13 - 3$

③ $10 - 1$
$10 - 3$
$10 - 2$
$10 - 5$

④ $11 - 1 - 2$
$13 - 3 - 1$
$12 - 2 - 3$
$15 - 5 - 2$

⑤ $12 - 2 - 1$
$14 - 4 - 3$
$11 - 1 - 4$
$13 - 3 - 2$



$11 - 3$

$11 - 1 = 10$

2

$10 - 2 = 8$

$11 - 3 = 8$

⑥ $11 - 4$
$11 - 3$

⑦ $11 - 2$
$11 - 5$

⑧ $10 - 4$
$11 - 9$

⑨ $11 - 6$
$9 - 5$

⑩ $7 - 3$
$11 - 7$

$11 - 3 = 8$
$11 - 8 = 3$

⑪ $11 - 2$
$11 - 9$

⑫ $11 - 5$
$11 - 6$

⑬ $11 - 4$
$11 - 7$

⑭ $11 - 3$
$11 - 8$

11

$9 + 2$	$2 + 9$
$8 + 3$	$3 + 8$
$7 + 4$	$4 + 7$
$6 + 5$	$5 + 6$

$11 - 2$	$11 - 9$
$11 - 3$	$11 - 8$
$11 - 4$	$11 - 7$
$11 - 5$	$11 - 6$

⑮ $7 + 4$ | $11 - 4$
$4 + 7$ | $11 - 7$

⑯ $6 + 5$ | $11 - 5$
$5 + 6$ | $11 - 6$

① $6 + x = 10$
$8 + x = 10$
$9 + x = 10$
$7 + x = 10$

② $6 = 4 + x$
$4 = 2 + x$
$3 = 1 + x$
$5 = 3 + x$

③ $6 + 4 + 2$
$8 + 2 + 2$
$9 + 1 + 2$
$7 + 3 + 2$

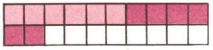
④ $12 - 2 - 4$
$12 - 2 - 2$
$12 - 2 - 1$
$12 - 2 - 3$

$6 + 6$

$6 + 4 = 10$

$10 + 2 = 12$

$6 + 6 = 12$



$6+6=12$
$12-6=6$

$12 - 6$

$12 - 2 = 10$

$10 - 4 = 6$

$12 - 6 = 6$

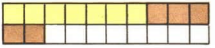
⑤

$8 + 4$
$4 + 8$
$12 - 4$
$12 - 8$

⑥

$9 + 3$
$3 + 9$
$12 - 3$
$12 - 9$

⑦



$7 + 5$
$5 + 7$
$12 - 5$
$12 - 7$

12

$9+3$	$3+9$
$8+4$	$4+8$
$7+5$	$5+7$
$6+6$	

$12-3$	$12-9$
$12-4$	$12-8$
$12-5$	$12-7$
$12-6$	

$9+3=12$
$3+9=12$

① 6 + 5 ② 7 + 4 ③ 9 + 2 ④ 9 + 3 ⑤ 6 + 6
5 + 6 4 + 7 2 + 9 3 + 9 3 + 3
8 + 4 6 + 3 7 + 5 8 + 3 5 + 5
4 + 8 3 + 6 5 + 7 3 + 8 4 + 4

$12-7$
$7+5=12$
$12-7=5$

$12-7$
$5+7=12$
$12-7=5$

$12-7=5$

⑥ 12 − 4 ⑦ 11 − 2 ⑧ 11 − 4 ⑨ 12 − 9 ⑩ 11 − 7 ⑪ 8 − 3
11 − 3 12 − 3 12 − 8 11 − 8 7 − 4 11 − 9
10 − 5 9 − 7 11 − 9 12 − 7 12 − 6 12 − 8
12 − 6 11 − 5 12 − 5 11 − 6 9 − 5 6 − 6

$12-4=8$
$8+4=12$

⑫ 10 − 3 ⑬ 12 − 7 ⑭ 11 − 7 ⑮ 9 − 3
11 − 3 12 − 8 12 − 5 12 − 4
12 − 3 12 − 9 11 − 9 8 − 6

$7+5=12$
$5+7=12$
$12-5=7$
$12-7=5$

⑯ 9 + 3 ⑰ 6 + 5 ⑱ 8 + 4 ⑲ 7 + 4

---

① 4 + 4 ② 9 − 6 ③ 12 − 9 ④ 11 + 4
8 + 4 12 − 4 16 − 5 16 − 2
12 + 4 11 − 8 12 − 3 12 + 7
4 + 7 12 −7 11 − 6 11 − 5

⑤ 9 + 3 ⑥ 12 − 7 ⑦ 15 − 5 ⑧ 7 + 5 ⑨ 11 − 7 ⑩ 2 + 7
9 − 3 6 + 6 4 + 8 12 − 6 11 + 7 9 − 9
12 + 8 18 − 3 12 + 5 14 − 2 12 + 6 0 + 8
12 − 8 8 + 3 12 − 5 3 + 9 12 − 6 12 + 0

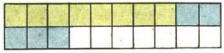
① $6 + x = 10$
$4 + x = 10$
$7 + x = 10$
$5 + x = 10$

② $4 = 1 + x$
$6 = 3 + x$
$8 = 5 + x$
$5 = 2 + x$

③ $5 + 5 + 3$
$7 + 3 + 3$
$4 + 6 + 3$
$8 + 2 + 3$

④ $13 - 3 - 1$
$13 - 3 - 4$
$13 - 3 - 6$
$13 - 3 - 2$

$8 + 5$
$8 + 2 = 10$
$10 + 3 = 13$

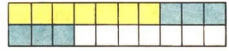


$8 + 5 = 13$; $13 - 5 = 8$

$13 - 5$
$13 - 3 = 10$
$10 - 2 = 8$

⑤

$9 + 4$ | $13 - 4$
$4 + 9$ | $13 - 9$

⑥ 

$7 + 6$ | $13 - 6$
$6 + 7$ | $13 - 7$

---

⑦ $8 + 5$ | $5 + 8$ | $13 - 5$ | $13 - 8$

13

$9+4$	$4+9$
$8+5$	$5+8$
$7+6$	$6+7$

$13-4$	$13-9$
$13-5$	$13-8$
$13-6$	$13-7$

$8+5=13$
$5+8=13$
$13-5=8$
$13-8=5$

⑧ $9 + 4$

⑨ $7 + 6$

⑩ $7 + 4$

⑪ $7 + 6$
$9 + 4$
$8 + 3$
$8 + 5$
$6 + 5$

⑫ $5 + 8$
$13 + 5$
$4 + 9$
$12 + 6$
$6 + 7$

⑬ $13 - 4$
$12 - 5$
$13 - 6$
$11 - 7$
$13 - 5$

⑭ $13 - 9$
$17 - 4$
$12 - 5$
$13 - 6$
$13 - 8$

⑮ $6 + 7$
$4 + 9$
$7 + 4$
$8 + 5$
$5 + 7$

⑯ $17 - 6$
$13 - 7$
$12 - 4$
$13 - 9$
$13 - 6$

Wenn $a = 5$, so $8 + a = 13$

Wenn $e = 5$, so $13 - e = 8$

①

a	$8 + a$
5	
2	
4	
1	
3	

②

u	$u + 5$
8	
4	
7	
0	
6	

③

e	$13 - e$
5	
2	
4	
6	
8	

④

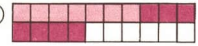
i	$13 - i$
9	
1	
7	
0	
3	

⑤

$9 + 5$ | $14 - 5$
$5 + 9$ | $14 - 9$

⑥

$8 + 6$ | $14 - 6$
$6 + 8$ | $14 - 8$

⑦ 

$7 + 7$ | $14 - 7$

14

$9+5$ | $5+9$
$8+6$ | $6+8$
$7+7$

$14-5$ | $14-9$
$14-6$ | $14-8$
$14-7$

⑧ $7 + 7$, $9 + 5$, $7 + 6$

⑨ $5 + 9$, $14 + 3$, $6 + 8$

⑩ $14 - 5$, $13 - 6$, $14 - 7$

⑪ $14 - 9$, $18 - 5$, $14 - 6$

⑫ $8 + 6$, $5 + 9$, $7 + 5$

⑬ $18 - 5$, $14 - 7$, $13 - 4$

Wenn $a = 5$ und $e = 3$, so $a + e = 8$

Wenn $i = 8$ und $u = 6$, so $i - u = 2$

⑭

a	e	$a + e$
5	3	
8	6	
6	4	
10	5	

⑮

i	u	$i - u$
8	6	
14	5	
10	2	
17	7	

① 9 Kinder rodeln. 4 Kinder davon gehen heim.
Wieviel Kinder rodeln nun noch?

② 6 Kinder sind auf dem Eis. Nun kommen 3 Kinder dazu.
Wieviel Kinder sind nun auf dem Eis?

③	④	⑤	⑥	⑦	⑧
14 − 7	9 + 5	17 − 6	5 + 4	12 − 5	9 + 4
13 − 5	12 + 3	14 − 6	7 + 6	14 − 8	8 − 5
12 − 6	6 + 8	18 − 5	9 − 4	13 + 2	8 + 6
11 − 3	17 + 3	13 − 5	8 + 6	14 − 5	9 − 7
10 − 4	7 + 7	14 − 9	8 − 3	14 + 5	7 + 7

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6	7	8	9	10	11	12	13
4	4	5	6	7	8	9	10	11	12	13	14
5	5	6	7	8	9	10	11	12	13	14	15
6	6	7	8	9	10	11	12	13	14		16
7	7	8	9	10	11	12	13	14			17
8	8	9	10	11	12	13	14				18
9	9	10	11	12	13	14					19
10	10	11	12	13	14	15	16	17	18	19	20

2 + 4 = 6

4 + 2 = 6

5 + 8 = 13

8 + 5 = 13

⑨

4 + 4	3 + 0
7 + 6	9 + 3

⑩

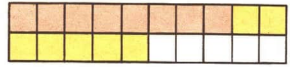
5 + 1	7 + 2
8 + 8	7 + 5

⑪

9 + 0	7 + 7
10 + 6	8 + 5

①

9 + 6	15 − 6
6 + 9	15 − 9

② 

8 + 7	15 − 7
7 + 8	15 − 8

15

9 + 6	6 + 9
8 + 7	7 + 8

15 − 6	15 − 9
15 − 7	15 − 8

③
6 + 6
7 + 8
4 + 7
9 + 6
6 + 8

④
6 + 9
7 + 7
8 + 7
9 + 4
5 + 7

⑤
13 − 9
15 − 8
11 − 7
15 − 6
12 − 7

⑥
15 − 7
12 − 6
15 − 9
14 − 8
11 − 9

⑦
6 + 9
14 − 7
9 + 5
15 − 8
9 + 2

⑧
12 − 3
6 + 7
14 − 9
7 + 8
13 − 5

⑨

Summe
12
7+5=12

⑩

Summe
15

⑪

Summe
11

⑫

Summe
14

⑬

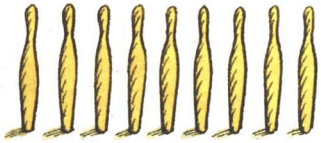
a	e	a + e
12	4	
7	8	
8	0	
9	6	
0	9	

⑭

e	i	e − i
12	6	
15	9	
15	7	
13	5	
11	4	

⑮

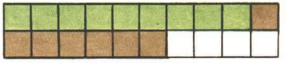
a	i	a − i
15	3	
14	2	
15	6	
15	8	
12	0	



⑯

①

$8+8$ | $16-8$

② 

$9+7$ | $16-7$
$7+9$ | $16-9$

16

$9+7$ | $7+9$
$8+8$

$16-7$ | $16-9$
$16-8$

③ $5+5$ $6+6$ $7+7$ $8+8$

④ $6+9$ $3+9$ $5+9$ $7+9$

⑤ $10-5$ $12-6$ $14-7$ $16-8$

⑥ $16-9$ $15-9$ $14-9$ $13-9$

⑦ $6+8$ $16-8$ $7+9$ $17-3$

⑧ $9-9$ $9+7$ $16+3$ $16-7$

⑨

11	
9	2
5	
7	
10	
6	

⑩

13	
9	
12	
8	
7	
10	

⑪

16	
10	
4	
2	
11	
0	

⑫

14	
7	
4	
5	
12	
8	

⑬

15	
8	
10	
9	
14	
1	

⑭ $6+x=13$
$8+x=16$
$3+x=11$
$7+x=16$
$12+x=19$

⑮ $12-x=5$
$9-x=4$
$16-x=8$
$14-x=9$
$16-x=7$

⑯ $9+x=15$
$15-x=9$
$11+x=13$
$15-x=8$
$8+x=15$

$9<16$; $9+7=16$
$14>8$; $8+6=14$

① 8 16 / 4 12 / 9 14 / 6 12

② 13 4 / 16 7 / 15 9 / 14 8

③ 18 13 / 15 17 / 6 11 / 11 18

①

$9+8$ | $17-8$
$8+9$ | $17-9$

②

$9+9$ | $18-9$

17	$9+8$ | $8+9$	$17-8$ | $17-9$
18	$9+9$ |	$18-9$ |

③	④	⑤	⑥	⑦	⑧
$6+6$	$3+9$	$14-8$	$16-9$	$12+5$	$18-9$
$6+9$	$9+9$	$12-8$	$17-9$	$8+9$	$8+8$
$6+5$	$5+9$	$17-8$	$13-9$	$15-3$	$8-8$
$6+8$	$2+9$	$11-8$	$15-9$	$17-8$	$9+8$
$6+7$	$4+9$	$13-8$	$14-9$	$7+6$	$17-8$

⑨	⑩	⑪	⑫	⑬	⑭
$8+3$	$4+7$	$18-9$	$15-6$	$8+8$	$13-8$
$8+4$	$5+7$	$16-8$	$15-7$	$17-8$	$8+9$
$8+5$	$6+7$	$14-7$	$15-8$	$9+9$	$17-9$
$8+6$	$7+7$	$12-6$	$15-9$	$16-7$	$7+8$
$8+7$	$9+7$	$15-7$	$15-3$	$7+8$	$16-9$

⑮	⑯	⑰	⑱	⑲	⑳
$17-9$	$18-9$	$9-3$	$11-4$	$15+4$	$9-8$
$9+8$	$9+9$	$3+9$	$11+7$	$15-4$	$9+8$
$17-8$	$16-9$	$12+3$	$4+7$	$11+9$	$9-9$
$8+9$	$7+9$	$12-9$	$7-4$	$11-9$	$9+9$

---

① $8+a<12$
$9+a<11$
$9+a<13$
$7+a<11$
$8+a<11$

② $13-a>9$
$11-a>7$
$12-a>8$
$11-a>9$
$12-a>9$

③ $16+i<18$
$8+a<12$
$17-e>14$
$12-u>9$
$9-a>6$

Übung und Wiederholung

①	②	③	④
$6 + x = 10$	$13 - a = 10$	$9 - a > 5$	$14 - u > 10$
$8 + x = 12$	$14 - a = 8$	$3 + a < 7$	$12 + u < 15$
$5 + x = 13$	$17 - a = 13$	$8 - a > 6$	$13 - u > 9$
$9 - x = 7$	$12 - a = 7$	$7 + a < 9$	$8 + u < 12$
$8 - x = 3$	$18 - a = 9$	$9 - a > 5$	$11 - u > 8$

⑤ 7 Jungen und 8 Mädchen spielen.
Wieviel Kinder spielen?

⑥ 14 Kinder spielen; 7 von ihnen im Sand.
Wieviel Kinder spielen auf dem Rasen?

⑦

e	$e + 8$
1	
7	
9	
4	
6	

⑧

i	$i - 6$
10	
8	
12	
15	
11	

⑨

u	$7 + u$
8	
2	
12	
9	
11	

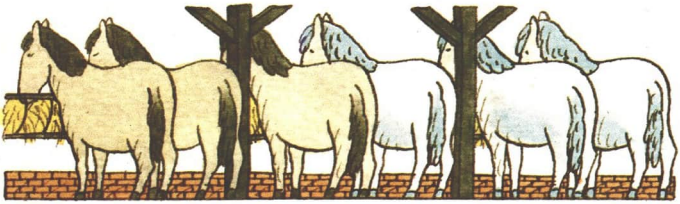
⑩

a	e	$a - e$
9	7	
12	6	
17	9	
15	8	
17	8	

⑪ Horst hat 8 Fahnen. Er gibt 3 Fahnen ab.
Wieviel Fahnen behält Horst?

⑫ 20 Pioniere sollen kommen. 2 Pioniere fehlen noch.
Wieviel Pioniere sind schon da?

Multiplizieren

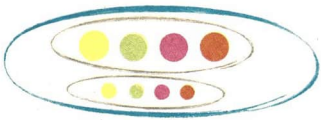


$2+2+2=6$

2; 3; 6;

$2 \cdot 3 = 6$ | $3 \cdot 2 = 6$

$3+3=6$



$2+2+2+2=8$

2; 4; 8;

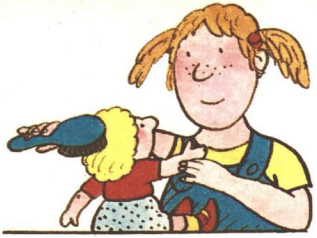
$2 \cdot 4 = 8$ | $4 \cdot 2 = 8$

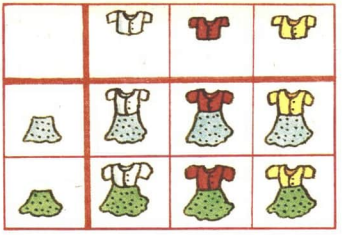
$4+4=8$

- Das ist das Zeichen für „mal“.

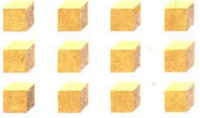
Faktor	·	Faktor	=	
3		2		6
Produkt				Produkt

Durch Multiplizieren berechnet man ein Produkt.





$3 \cdot 2 = 6$
$2 \cdot 3 = 6$



$3 + 3 + 3 + 3 = 12$
$4 + 4 + 4 = 12$

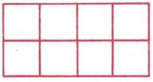
$3 \cdot 4 = 12$
$4 \cdot 3 = 12$

$2 + 2 + 2 = 6$
$3 + 3 = 6$

$2 \cdot 3 = 6$
$3 \cdot 2 = 6$

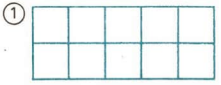
Faktoren kann man vertauschen; das Produkt ist gleich.

$4 \cdot 2$



$2 \cdot 4 = 8$
$4 \cdot 2 = 8$

$5 \cdot 2$

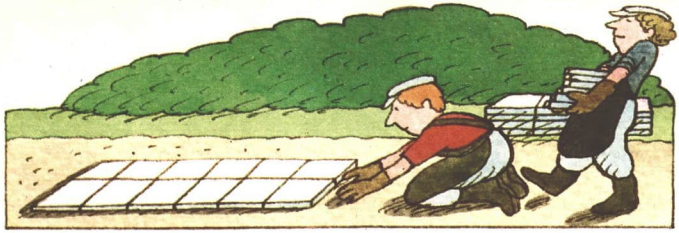


$5 \cdot 2$
$2 \cdot 5$

$2 \cdot 2$

$1 \cdot 2$

$1 \cdot 2 = 2$ $2 \cdot 1 = 2$	$2 \cdot 2 = 4$	$3 \cdot 2 = 6$ $2 \cdot 3 = 6$	$4 \cdot 2 = 8$ $2 \cdot 4 = 8$	$5 \cdot 2 = 10$ $2 \cdot 5 = 10$



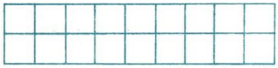
$6+6+6=18$ $3+3+3+3+3+3=18$

$6 \cdot 3 = 18$

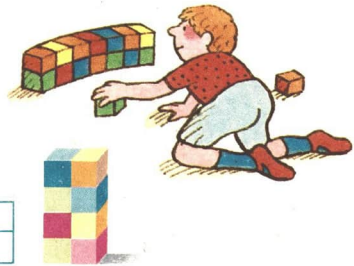
$3 \cdot 6 = 18$

$7+7=14$ $7 \cdot 2 = 14$ $2 \cdot 7 = 14$

①

② 

③



$2 \cdot 5$

$5+5=10$

$2 \cdot 5 = 10$

$5 \cdot 2 = 10$

④ $6+6$

⑤ $7+7$

$2 \cdot 3$

$2+2+2=6$

$2 \cdot 3 = 6$

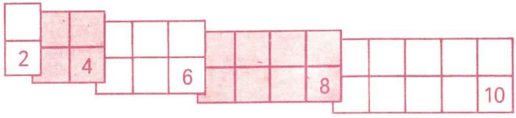
$3 \cdot 2 = 6$

⑥ $9+9$

⑦ $10+10$

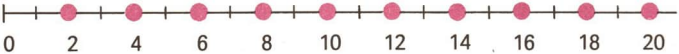
$6 \cdot 2 = 12$ $2 \cdot 6 = 12$	$7 \cdot 2 = 14$ $2 \cdot 7 = 14$	$8 \cdot 2 = 16$ $2 \cdot 8 = 16$	$9 \cdot 2 = 18$ $2 \cdot 9 = 18$	$10 \cdot 2 = 20$ $2 \cdot 10 = 20$

① 2 + 2 ② 8 + 8 ③ 1 + 1 ④ 10 + 10 ⑤ 5 + 5
7 + 7 3 + 3 6 + 6 4 + 4 9 + 9



2	4	6	8	10	12	14	16	18	20

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20



1 · 2 = 2	2 · 1 = 2
2 · 2 = 4	2 · 2 = 4
3 · 2 = 6	2 · 3 = 6
4 · 2 = 8	2 · 4 = 8
5 · 2 = 10	2 · 5 = 10
6 · 2 = 12	2 · 6 = 12
7 · 2 = 14	2 · 7 = 14
8 · 2 = 16	2 · 8 = 16
9 · 2 = 18	2 · 9 = 18
10 · 2 = 20	2 · 10 = 20

⑥

a	$a + a$
1	
3	
8	
10	
5	

⑦

a	$a \cdot 2$
1	
3	
8	
10	
5	

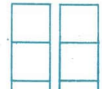
⑧

e	$e + e$
4	
7	
9	
6	
2	

⑨

e	$e \cdot 2$
4	
7	
9	
6	
2	

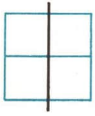
4 : 2 = 2



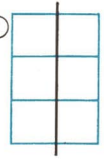
6 : 2 = 3

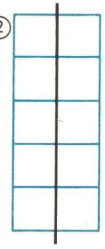
: Das ist das Zeichen für „geteilt durch".

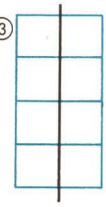
Gleichungen wie 6 : 2 = 3
schreibt man beim Dividieren.

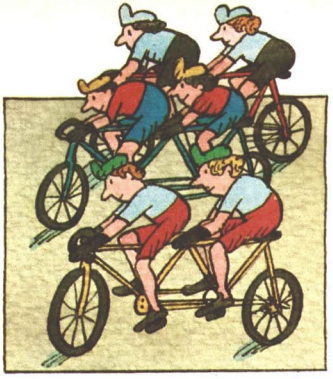


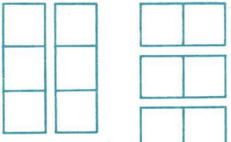
4 : 2 = 2

① 

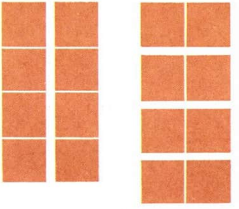
② 

③ 

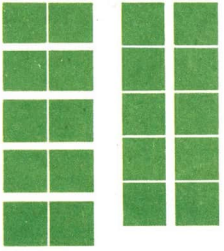




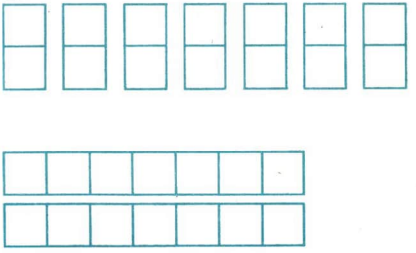
6 : 2 = 3



8 : 2 = 4

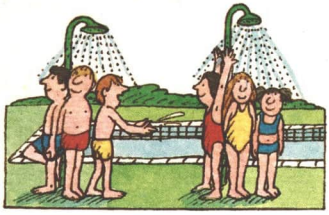
① 

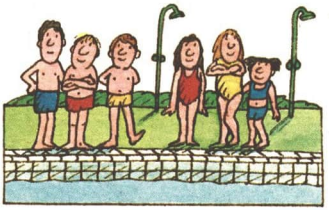
10 : 2

② 

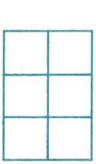
14 : 2

Multiplizieren und Dividieren

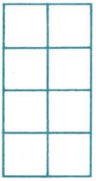


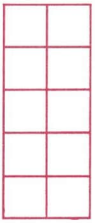


$6 : 2 = 3$, denn $2 \cdot 3 = 6$
$3 \cdot 2 = 6$



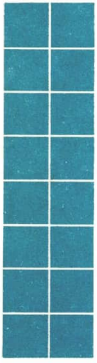
$6 : 2 = 3$
$3 \cdot 2 = 6$

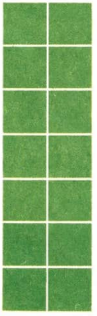
① 

② 

③

④

⑤ 

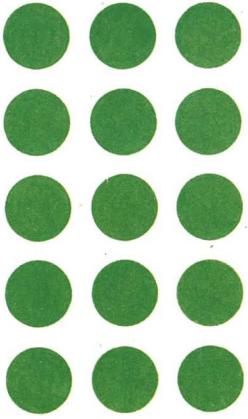
⑥ 

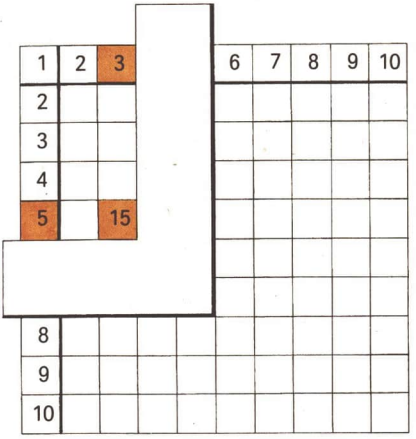
⑦

Merke!	
$1 \cdot 2 = 2$	$2 : 2 = 1$
$2 \cdot 2 = 4$	$4 : 2 = 2$
$3 \cdot 2 = 6$	$6 : 2 = 3$
$4 \cdot 2 = 8$	$8 : 2 = 4$
$5 \cdot 2 = 10$	$10 : 2 = 5$
$6 \cdot 2 = 12$	$12 : 2 = 6$
$7 \cdot 2 = 14$	$14 : 2 = 7$
$8 \cdot 2 = 16$	$16 : 2 = 8$
$9 \cdot 2 = 18$	$18 : 2 = 9$
$10 \cdot 2 = 20$	$20 : 2 = 10$

① $3 \cdot 2$ | $6 \cdot 2$ | $10 \cdot 2$
$5 \cdot 2$ | $4 \cdot 2$ | $2 \cdot 2$
$7 \cdot 2$ | $8 \cdot 2$ | $9 \cdot 2$

② $12 : 2$ | $14 : 2$ | $4 : 2$
$8 : 2$ | $18 : 2$ | $10 : 2$
$20 : 2$ | $6 : 2$ | $16 : 2$





$3 \cdot 5 = 15$
$5 \cdot 3 = 15$

Löse durch Abdecken!

③ $3 \cdot 4$ $4 \cdot 3$ ④ $3 \cdot 5$ $5 \cdot 3$ ⑤ $3 \cdot 6$ $6 \cdot 3$ ⑥ $4 \cdot 5$ $5 \cdot 4$ ⑦ $3 \cdot 3$ $4 \cdot 4$

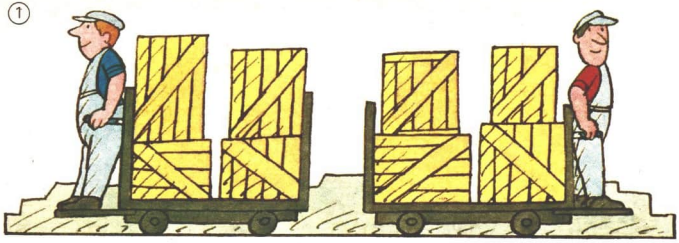
$6+6+6=18$
$3 \cdot 6=18$
$6 \cdot 3=18$

⑧ $4+4+4$ $5+5+5$ $3+3+3$ $2+2+2$

⑨ $6+6$ $8+8$ $4+4$ $9+9$

⑩ $4+4+4+4$ $3+3+3+3$ $5+5+5+5$ $2+2+2+2$

①



② Ein Auto fährt zweimal zum Bahnhof und holt jedesmal 5 Kisten.
Wieviel Kisten holt das Auto?

③

a	$a \cdot 2$
3	
6	
2	
5	

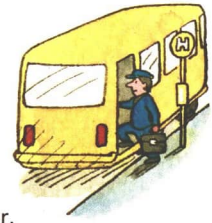
④

e	$2 \cdot e$
4	
1	
10	
7	

⑤

a	$a \cdot 2$	$2 \cdot a$
3		
5		
9		
7		

⑥ 2 Lastwagen kommen ins Werk.
Auf jedem Wagen stehen 2 Maschinen.
Wieviel Maschinen erhält das Werk?



⑦ Ein Faktor ist 2, der andere Faktor ist 7.
Multipliziere!

⑧ In einem Omnibus fahren 18 Arbeiter.
Im nächsten Omnibus fahren 2 Arbeiter mehr.
Wieviel Arbeiter fahren in diesem Omnibus?

⑨

a	$2 \cdot a$
9	
7	
1	
10	

⑩

e	$e \cdot 2$
5	
2	
8	
3	

⑪

i	$i : 2$
12	
8	
20	
4	

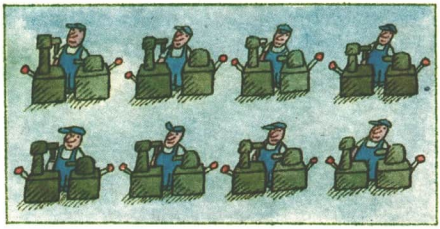
⑫

u	$u : 2$
2	
10	
14	
18	

①	②	③	④	⑤	⑥
0 + 2	10 + 2	4 + 9	10 + 10	18 − 6	16 − 9
2 + 2	12 + 2	8 + 8	7 + 7	15 − 7	17 − 8
4 + 2	14 + 2	7 + 6	1 + 0	13 − 8	18 − 9
8 + 2	18 + 2	5 + 8	9 + 9	12 − 6	15 − 8

⑦

a	e	$a \cdot e$
2	4	
6	2	
2	3	
7	2	
2	7	



⑧ In der Werkhalle arbeiten 8 Arbeiter. Jeder bedient 2 Maschinen. An wieviel Maschinen wird gearbeitet?

⑨ In einem Saal stehen 10 Maschinen.
In einem anderen Saal stehen doppelt soviel Maschinen.
Wieviel Maschinen stehen im zweiten Saal?

⑩ 16 Kisten werden verladen.
Auf einen Wagen kommen 9 Kisten.
Wieviel Kisten kommen auf den anderen Wagen?

⑪ Addiere 18 und 2!

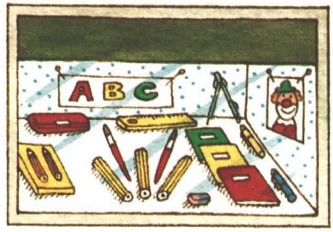
⑫ Ein Summand ist 7, der andere Summand ist 8.
Errechne die Summe!

Bilde Gleichungen!

$6 - 2 = 4$
$6 \cdot 2 = 12$
$6 : 2 = 3$
$6 + 2 = 8$

⑬			⑭			⑮		
10	2	5	8	2	6	4	2	2
10	2	8	8	2	4	4	2	6
10	2	20	8	2	16	4	2	8
10	2	12	8	2	10	4	2	2

① Ein Heft kostet 10 Pf.
Wieviel Pfennig kosten
2 Hefte?

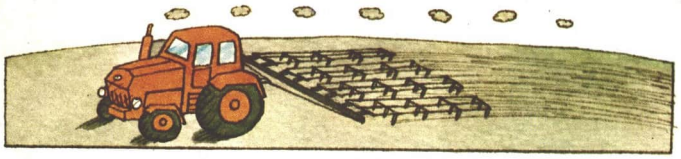


② Horst kauft 6 Hefte.
Uta kauft 5 Hefte mehr als
Horst.
Wieviel Hefte kauft Uta?

③ In einem Kasten sind 12 Buntstifte. Frank nimmt 3 davon heraus. Wieviel Stifte bleiben in diesem Kasten?

④ Bernd hat 5 Murmeln. Paul hat ebenso viele Murmeln.
Wieviel Murmeln hat Paul?

⑤	⑥	⑦	⑧
$2 \cdot x = 4$	$x - 2 = 10$	$8 : 2$	$18 + 2$
$2 + x = 8$	$x + 2 = 20$	$4 \cdot 2$	$20 : 2$
$20 - x = 18$	$x \cdot 2 = 2$	$10 + 2$	$2 \cdot 2$
$2 \cdot x = 12$	$x - 2 = 6$	$12 - 2$	$16 - 2$
$12 + x = 16$	$x + 2 = 14$	$6 : 2$	$14 : 2$

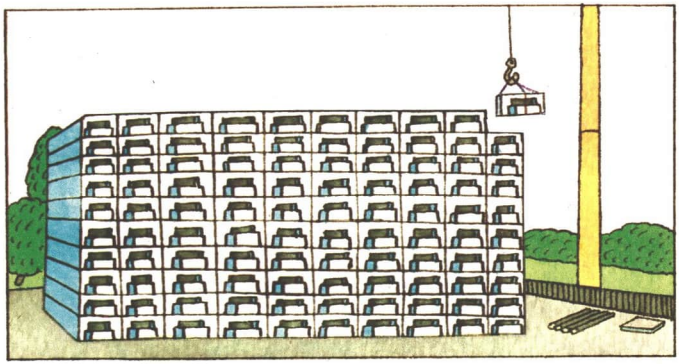


⑨ Auf einem Feld arbeiten 2 Brigaden mit je 8 Bauern.
Wieviel Bauern arbeiten auf dem Feld?

⑩ Auf einem Feld arbeiten 5 Traktoren.
Nun fährt ein Traktor weg.
Wieviel Traktoren bleiben auf dem Feld?

⑪ 3 Kälber und 5 Schweine werden verkauft.
Wieviel Tiere werden verkauft?

Die Vielfachen von 10



10	10	$1 \cdot 10 = 10$
20	$10 + 10 = 20$	$2 \cdot 10 = 20$
30	$20 + 10 = 30$	$3 \cdot 10 = 30$
40	$30 + 10 = 40$	$4 \cdot 10 = 40$
50	$40 + 10 = 50$	$5 \cdot 10 = 50$
60	$50 + 10 = 60$	$6 \cdot 10 = 60$
70	$60 + 10 = 70$	$7 \cdot 10 = 70$
80	$70 + 10 = 80$	$8 \cdot 10 = 80$
90	$80 + 10 = 90$	$9 \cdot 10 = 90$
100	$90 + 10 = 100$	$10 \cdot 10 = 100$

10 20 30 40 50 60 70 80 90 100

(10) | (10) (10) | (10) (10) (10) | (10) (10) (10) (10)

$10 = 1 \cdot 10$ | $20 = 10 + 10$, $20 = 2 \cdot 10$ | $30 = 10 + 10 + 10$, $30 = 3 \cdot 10$ | $40 = 10 + 10 + 10 + 10$, $40 = 4 \cdot 10$

Lege mit Zehnerstreifen!

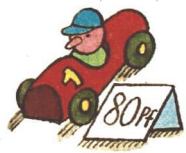
① 30, 20, 50, 10, 70

② 40, 90, 60, 80, 100

Lege mit Rechengeld!

③ 20, 60, 90, 40, 10

④ 30, 70, 50, 80, 100



$3 \cdot 10 = 30$

⑤ $4 \cdot 10$, $7 \cdot 10$, $2 \cdot 10$

⑥ $8 \cdot 10$, $6 \cdot 10$, $10 \cdot 10$

$30 = 3 \cdot 10$

⑦ 20, 50, 70

⑧ 100, 40, 80

$30 = 20 + 10$

⑨ 70, 40, 60

⑩ 50, 20, 100

$x \cdot 10 = 40$, $x = 4$

denn $4 \cdot 10 = 40$

⑪ $x \cdot 10 = 50$; $x \cdot 10 = 30$; $x \cdot 10 = 70$

⑫ $x \cdot 10 = 20$; $x \cdot 10 = 80$; $x \cdot 10 = 100$

$50 = x \cdot 10$, $x = 5$

denn $50 = 5 \cdot 10$

⑬ $30 = x \cdot 10$; $70 = x \cdot 10$; $20 = x \cdot 10$

⑭ $80 = x \cdot 10$; $40 = x \cdot 10$; $10 = x \cdot 10$

⑮ $100 = x \cdot 10$; $60 = x \cdot 10$; $90 = x \cdot 10$

⑯

a	$a \cdot 10$
6	
3	
9	
2	

⑰

e	$e \cdot 10$
4	
1	
5	
10	

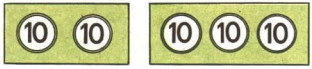
⑱

u	$u + 10$
40	
10	
70	
0	

10 · 10 Pf = 100 Pf

1 M

100 Pf = 1 M 100 Pfennig ist gleich 1 Mark.

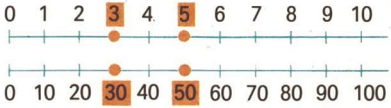


20 Pf sind weniger als 30 Pf.
30 Pf sind mehr als 20 Pf.

Lege und vergleiche!

① 30 Pf und 50 Pf
70 Pf und 40 Pf
80 Pf und 90 Pf

3 < 5	5 > 3
30 < 50	50 > 30



Vergleiche!

② 2 ☐ 6 | 7 ☐ 4 | 8 ☐ 6 | 5 ☐ 9
20 ☐ 60 | 70 ☐ 40 | 80 ☐ 60 | 50 ☐ 90

③ 40 ☐ 80 | 60 ☐ 90 | 50 ☐ 20 | 70 ☐ 100

Ordne!

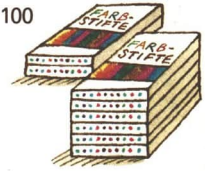
④ 30, 20, 60, 50, 10

⑤ 80, 60, 70, 40, 90

Zähle!

⑥ 10, 20, 30, …, 100

⑦ 100, 90, 80, …, 10



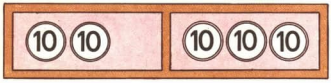
Wiederhole!

⑧ 8 + 3 | 4 + 7
7 + 6 | 6 + 9
9 + 5 | 7 + 8

⑨ 12 − 5 | 11 − 4
16 − 9 | 15 − 8
13 − 7 | 14 − 6

⑩ 4 + 3 + 6
13 − 7 − 5
6 + 8 − 7

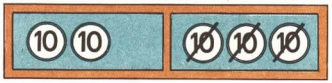
20 + 30



20+30=50

denn 2 + 3 = 5

50 − 30



50−30=20

denn 5 − 3 = 2

---

① 50 + 30 | 70 + 20 | 20 + 50
5 + 3 | 7 + 2 | 2 + 5

② 60 − 40 | 70 − 30 | 90 − 40
6 − 4 | 7 − 3 | 9 − 4

③ 30 + 20 ④ 60 + 20 ⑤ 50 + 20 ⑥ 80 − 30 ⑦ 70 − 40 ⑧ 90 − 30

50 + 40 40 + 40 40 + 50 90 − 50 90 − 60 70 − 50

30 + 50 30 + 60 70 + 20 50 − 40 60 − 50 80 − 70

40−30=10
10+30=40

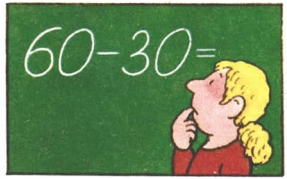
⑨ 60 − 30 | 80 − 50 | 70 − 20
90 − 70 | 30 − 20 | 100 − 40

⑩

a	a + 30
30	
20	
60	
40	

⑪

e	e − 30
60	
90	
70	
100	



⑫ 40 + x = 70 ⑬ x + 30 = 50 ⑭ 70 − x = 50 ⑮ x − 30 = 10

50 + x = 90 x + 20 = 60 60 − x = 10 x − 20 = 60

20 + x = 80 x + 60 = 90 80 − x = 40 x − 40 = 30

70<90
70+20=90
80>60
80=60+20

Vergleiche!

⑯ 20 60 ⑰ 80 20 ⑱ 40 90

40 70 50 10 20 50

60 30 30 70 100 30

Das Meter

1 m ein Meter	1 m = 100 cm

① Miß mit einem Meterstab oder einem Bindfaden von 1 m Länge,
- wie lang und wie breit euer Wohnzimmer,
- wie lang eure Wäscheleine ist!

② Schätze, ob die Tür eures Klassenzimmers
- breiter oder schmaler,
- höher oder niedriger als 1 m ist! Miß nach!

③ Stelle fest, wieviel Schritte du brauchst, um eine Strecke von 10 m Länge abzuschreiten!

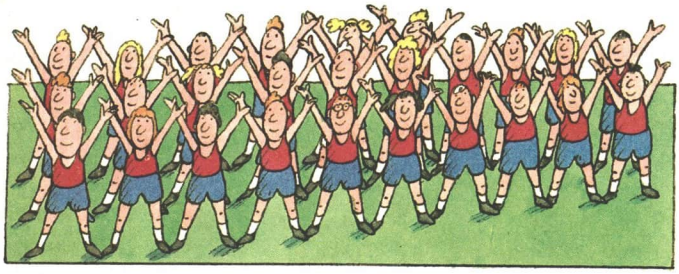
④	⑤	⑥	⑦
14 m + 3 m	17 m − 4 m	30 m + 40 m	80 m − 70 m
12 m + 4 m	16 m − 5 m	20 m + 60 m	90 m − 50 m
13 m + 5 m	18 m − 2 m	40 m + 20 m	100 m − 80 m

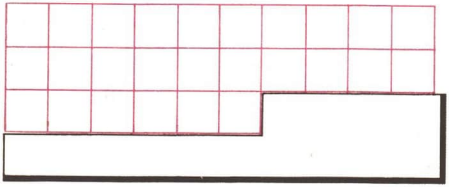
⑧ Udos Drachenschnur ist 15 m lang.
Er knüpft noch ein Stück von 5 m Länge an.
Wie lang ist nun die Drachenschnur?

⑨ Auf dem Sportplatz sind zwei Laufstrecken abgesteckt.
Eine ist 60 m lang, die zweite ist 40 m länger.
Wie lang ist die zweite Laufstrecke?

⑩ Werner und Rudi basteln Wimpelketten.
Werner sagt: „Meine Kette ist 1 m lang."
Rudi behauptet: „Ich war fleißiger, denn meine Kette ist schon 100 cm lang."
Hat Rudi recht?

Alle Zahlen von 0 bis 100





$20+6=26$
$26=20+6$

$26 = 2 \cdot 10 + 6$

Zeige am Hunderterquadrat!
① 34, 47, 29, 76, 67
② 85, 52, 98, 13, 31

Lege mit Ziffernkarten!
③ 18, 24, 35, 67, 42
④ 81, 63, 29, 38, 92

Lies und schreibe!
⑤ 28, 82, 74, 47, 66
⑥ 93, 39, 51, 15, 77

$30+6=36$

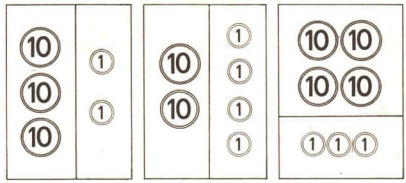
⑦	⑧	⑨	⑩
30 + 5	20 + 9	50 + 4	80 + 8
60 + 3	80 + 1	90 + 5	40 + 6
40 + 7	10 + 8	20 + 3	70 + 3
70 + 2	90 + 6	70 + 9	30 + 4
50 + 8	60 + 7	40 + 2	50 + 9

$47=40+7$

⑪	⑫	⑬	⑭
38	64	97	21
45	37	43	94
84	56	65	49
71	83	86	54
93	51	69	75

① Lege mit Rechengeld! ② Trage in eine Tabelle ein!

10	1
2	3
3	4
4	1



10	1	
4	7	$47 = 4 \cdot 10 + 7$
6	2	$62 = 6 \cdot 10 + 2$
5	8	$58 = 5 \cdot 10 + 8$

Trage in eine Stellentafel ein!

③

91	73
89	36

④

57	72
96	41

$53 = 5 \cdot 10 + 3$

⑤

42	74
93	38
26	85

⑥

66	23
51	15
48	84

⑦

97	83
32	68
55	19

$6 \cdot 10 + 9 = 69$

⑧

$2 \cdot 10 + 8$
$4 \cdot 10 + 5$
$6 \cdot 10 + 4$

⑨

$7 \cdot 10 + 6$
$9 \cdot 10 + 2$
$3 \cdot 10 + 1$

⑩

$1 \cdot 10 + 7$
$5 \cdot 10 + 6$
$8 \cdot 10 + 3$

⑪

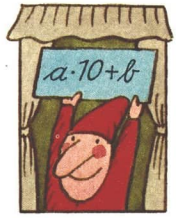
b	$30 + b$
5	
2	
4	
7	
1	

⑫

b	$80 + b$
6	
5	
3	
8	
4	

⑬

a	$a \cdot 10$
2	
6	
9	
3	
1	



$30 + x = 37$

$x = 7$

denn $30 + 7 = 37$

① $40 + x = 45$ ② $60 + x = 68$

$20 + x = 29$ $10 + x = 16$

$70 + x = 77$ $30 + x = 34$

$50 + x = 52$ $80 + x = 89$

$x + 3 = 53$

$x = 50$

denn $50 + 3 = 53$

③ $x + 4 = 84$ ④ $x + 1 = 31$ ⑤ $x + 8 = 18$

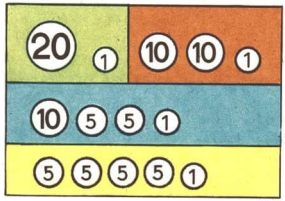
$x + 3 = 23$ $x + 6 = 56$ $x + 5 = 95$

$x + 7 = 47$ $x + 2 = 82$ $x + 6 = 36$

$x + 5 = 75$ $x + 9 = 49$ $x + 3 = 53$

Geldbeträge kann man auf verschiedene Weise mit Münzen zahlen.

Beispiel: 21 Pf



⑥ Gib verschiedene Möglichkeiten an, wie du die folgenden Beträge mit Münzen zahlen kannst!

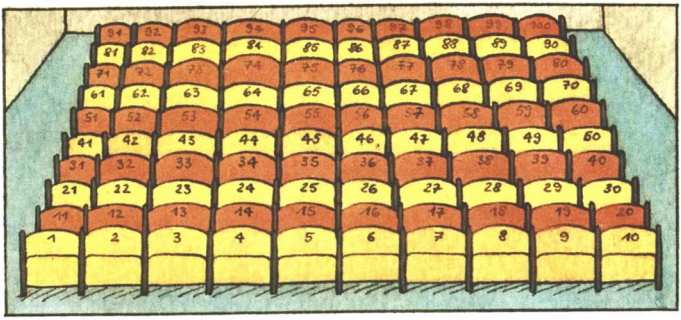
17 Pf, 28 Pf, 45 Pf, 50 Pf, 32 Pf, 70 Pf, 1 M

$20 + 5 = 25$

Peter kauft eine Briefmarke zu 20 Pf und eine Briefmarke zu 5 Pf.
Wieviel Geld muß Peter zahlen?
Peter muß 25 Pf zahlen.

⑦ Doris hat 40 M gespart. Gisa hat schon 3 M mehr gespart als Doris.
Wieviel Geld hat Gisa gespart?

Die Ordnung der Zahlen von 0 bis 100



			Vergleiche!					
0 < 1	10 < 11	20 < 21	① 30	31	② 70	71	③ 90	91
1 < 2	11 < 12	21 < 22	31	32	71	72	91	92
2 < 3	12 < 13	22 < 23	32	33	72	73	92	93
⋮	⋮	⋮	⋮		⋮		⋮	
9 < 10	19 < 20	29 < 30	39	40	79	80	99	100

Zähle!

④ von 21 bis 30
von 81 bis 90
von 91 bis 100

⑤ von 39 bis 30
von 59 bis 50
von 79 bis 70

⑥ von 25 bis 34
von 17 bis 26
von 53 bis 62

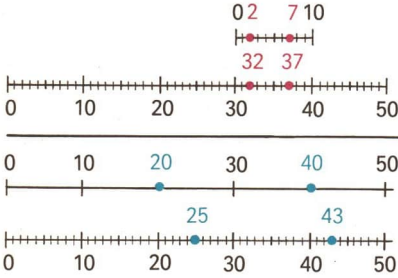
35
35 < 36
34 < 35

Bestimme den Nachfolger!

⑦ 5, 25, 35, 55
⑧ 43, 83, 73, 23
⑨ 27, 83, 65, 72
⑩ 39, 59, 79, 99

Bestimme den Vorgänger!

⑪ 7, 17, 27, 67
⑫ 1, 11, 21, 51
⑬ 53, 84, 26, 37
⑭ 80, 70, 90, 30



Wir vergleichen

32 und 37

$2 < 7$ $\quad 32 < 37$

$7 > 2$ $\quad 37 > 32$

25 und 43

$20 < 40$ $\quad 25 < 43$

$40 > 20$ $\quad 43 > 25$

$54 < 58$ $\quad 4 < 8$

$46 > 41$ $\quad 6 > 1$

$27 < 75$ $\quad 20 < 70$

$83 > 69$ $\quad 80 > 60$

Vergleiche!

① 6	9	② 8	4	③ 2	7	④ 30	40	⑤ 90	50
16	19	38	34	62	67	32	42	94	56
26	29	78	74	92	97	38	48	98	53

Vergleiche!

⑥ 46	43	⑦ 28	24	⑧ 42	72	⑨ 23	57	⑩ 37	16
72	74	93	95	83	53	79	49	29	44
55	59	39	36	35	65	51	93	95	87
87	81	14	17	74	44	62	28	52	18

Ordne! Beginne mit der kleinsten Zahl!

⑪ 73, 78, 72, 75, 71

⑫ 28, 18, 78, 98, 48

⑬ 58, 56, 17, 12, 52

⑭ 70, 75, 30, 35, 50

Ordne! Beginne mit der größten Zahl!

⑮ 42, 45, 41, 48, 43

⑯ 56, 96, 66, 26, 16

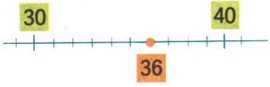
⑰ 35, 74, 79, 24, 28

⑱ 41, 72, 53, 34, 85

Zwischen 28 und 32
liegen 29, 30, 31.

Welche Zahlen liegen zwischen

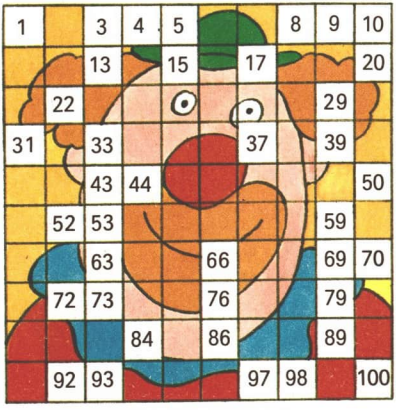
① 34 und 37 ② 86 und 89 ③ 70 und 76 ④ 18 und 23
41 und 45 53 und 58 94 und 100 69 und 75?



36 liegt zwischen 30 und 40.

Zwischen welchen Vielfachen von 10 liegen die folgenden Zahlen?	⑤	⑥	⑦	⑧	⑨
	48	22	56	17	19
	73	88	65	34	91

Einige Kinder spielen mit einem Legespiel.
Auf Franks Kärtchen stehen die folgenden Aufgaben.
Rechne und zeige, auf welches Feld er das Kärtchen jeweils legen kann!



⑩ 8 + 7 ⑪ 9 − 5
4 + 5 12 − 7
3 + 7 15 − 7

⑫ 20 + 9 ⑬ 40 + 3
60 + 3 90 + 3
70 + 9 30 + 7

⑭
Welche Felder sind schon belegt?

⑮
Zeige das 3., 9., 17., 24., 38., 45., 71., 83. Feld!

0, 1, 2, 3, 4, ..., 98, 99, 100 sind natürliche Zahlen .
Die natürlichen Zahlen sind der Größe nach geordnet .

Zähle! ① von 7 bis 16 ② von 26 bis 35 ③ von 48 bis 57
④ von 12 bis 3 ⑤ von 45 bis 36 ⑥ von 74 bis 65

Jede natürliche Zahl (außer 0) hat einen Vorgänger .

62 < 63 < 64

Jede natürliche Zahl hat einen Nachfolger .

Bestimme bei den folgenden Zahlen den Vorgänger und den Nachfolger!

⑦ 14, 65, 48, 58, 73 ⑧ 21, 49, 71, 59, 99 ⑨ 10, 60, 30, 70, 90

Natürliche Zahlen kann man vergleichen .

15 = 15
14 < 17, denn 14 + 3 = 17
16 > 12, denn 16 = 12 + 4

Vergleiche!

⑩ 6 9 7 5 ⑪ 30 70 80 20

⑫ 35 37 49 41 ⑬ 72 27 38 83

=	<	>
ist gleich	ist kleiner als	ist größer als

Addieren

Summand + Summand = Summe + Summe

6 + 3 = 9

Subtrahieren

9 − 3 = 6

Differenz + Differenz

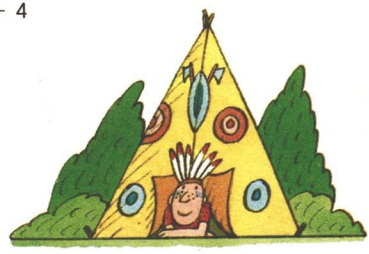
①	②	③	④	⑤	⑥
4 + 6	7 − 4	9 − 5	8 − 3	4 − 3	2 + 6
9 − 7	6 + 8	7 + 2	11 − 4	8 + 4	10 − 4
12 − 3	9 + 3	13 − 5	7 + 7	15 − 7	3 + 9
8 + 5	14 − 6	4 + 8	16 − 9	5 + 8	17 − 8

Lösen von Aufgaben, deren Ergebnisse nicht eingeprägt wurden

16 + 3	17 − 4	50 + 20	80 − 30
6 + 3 = 9	7 − 4 = 3	5 + 2 = 7	8 − 3 = 5
16 + 3 = 19	17 − 4 = 13	50 + 20 = 70	80 − 30 = 50

⑦	⑧	⑨	⑩	⑪
12 + 4	13 − 2	14 + 3	15 − 3	16 + 3
14 + 5	16 − 4	15 + 4	14 + 2	18 − 4
18 + 2	18 − 5	17 + 3	19 − 4	12 + 5
13 + 4	19 − 3	12 + 5		
11 + 5	15 − 4	11 + 4		

⑫	⑬
90 − 40	30 + 20
40 + 30	60 − 50
60 − 20	90 − 30
30 + 50	70 − 50
80 − 60	50 + 40
50 − 50	80 − 70



Summanden kann man vertauschen. Die Summe ist gleich.	$5+2=7 \longrightarrow 2+5=7$
Zu Additionsgleichungen kann man Subtraktionsgleichungen bilden.	$5+2=7 \rightarrow 7-2=5$, $7-5=2$

Löse die folgenden Aufgaben! Bilde stets mit denselben Zahlen drei weitere Gleichungen!

① 2 + 3 ② 9 + 5 ③ 30 + 20 ④ 40 + 20
7 + 6 7 + 8 70 + 30 80 + 20

Überlege erst,
wie du die Aufgabe am einfachsten lösen kannst!

⑤ 14 + 5 ⑥ 4 + 13 ⑦ 60 + 3 ⑧ 50 + 7 ⑨ 7 + 11
6 + 12 12 + 4 8 + 40 2 + 10 9 + 70

Rechnen mit 0	
$a+0=a$	$a-0=a$
$0+a=a$	$a-a=0$

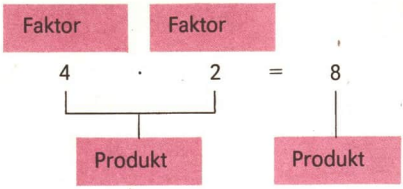
⑩	⑪	⑫
4 + 0	7 − 0	40 + 0
8 + 0	3 − 0	70 − 0
17 + 0	4 − 4	50 − 50
0 + 12	18 − 18	100 + 0

Summanden kann man beliebig zusammenfassen. Die Summe ist gleich.	$4+3+2$: $7+2=9$ und $4+5=9$

⑬ 4 + 2 + 3 | 3 + 6 + 4 ⑭ 12 + 5 + 2 | 8 + 9 + 3

Multiplizieren

Dividieren



8 : 2 = 4

①	②	③	④	⑤
7 · 2	2 · 2	5 · 10	12 : 2	8 · 2
8 : 2	8 · 2	7 · 10	6 · 2	16 : 2
9 · 2	14 : 2	3 · 10	18 : 2	10 · 2
6 : 2	10 : 2	10 · 10	9 · 2	20 : 2

⑥ Bei welchen der Aufgaben ① bis ⑤ mußt du multiplizieren? Nenne jeweils die Faktoren und das Produkt!

⑦ Bei welchen der Aufgaben ① bis ⑤ mußt du dividieren?

Faktoren kann man vertauschen. Das Produkt ist gleich.	4 · 3 = 12 ⟶ 3 · 4 = 12

Löse die folgenden Aufgaben! Bilde stets mit denselben Zahlen eine weitere Gleichung!

⑧	⑨	⑩	⑪	⑫	⑬
3 · 2	6 · 2	7 · 10	9 · 10	7 · 2	3 · 10
5 · 2	4 · 2	2 · 10	4 · 10	1 · 2	6 · 10
9 · 2	8 · 2	5 · 10	8 · 10	10 · 2	1 · 10

Bilde Gleichungen!

⑭			⑮			⑯			⑰		
8	2	10	10	2	20	16	7	9	1	9	10
8	2	16	10	2	8	8	5	13	2	9	18
8	2	6	10	2	5	5	5	1	4	2	8

①	②	③	④	⑤	⑥
3 + 6	8 − 5	6 + 7	14 − 8	6 · 2	16 : 2
2 + 5	7 − 6	5 + 8	16 − 7	9 · 2	20 : 2
4 + 0	9 − 7	8 + 8	15 − 9	4 · 2	14 : 2
2 + 8	5 − 0	7 + 9	12 − 5	8 · 2	18 : 2

⑦	⑧	⑨	⑩	⑪	⑫
14 + 2	16 + 4	18 − 3	20 − 3	18 − 7	19 − 4
18 + 1	12 + 8	17 − 4	20 − 5	14 + 3	16 − 5
13 + 4	17 + 3	19 − 6	20 − 6	18 − 4	13 + 7
12 + 7	14 + 6	16 − 5	20 − 8	13 + 6	15 + 3

⑬ Von 15 Kindern einer Hortgruppe sind 8 Kinder Jungen.
Wieviel Kinder sind Mädchen?

⑭	⑮	⑯	⑰	⑱
40 + 30	90 − 10	30 + 7	12 + 4	8 + 5
30 + 40	80 − 20	50 + 3	12 − 4	8 − 5
50 + 20	70 − 30	80 + 6	20 + 40	18 − 5

⑲

a	e	$a + e$
9	6	
12	7	
5	12	
70	20	

⑳

m	n	$m - n$
8	7	
14	6	
20	6	
80	30	

㉑

u	$u : 2$
8	
4	
10	
6	

㉒ Norma hat 70 Pf. Sie kauft für 40 Pf Hefte.
Wieviel Geld behält Norma?

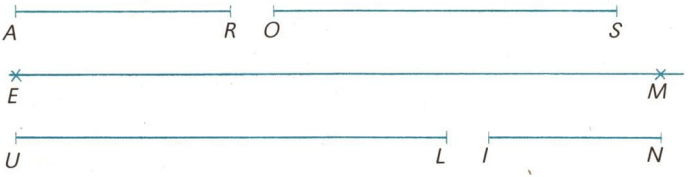
㉓	㉔	㉕	㉖	㉗
$a < 3$	$4 > a$	$3 + a < 7$	$6 - a > 4$	$8 - a > 4$
$e < 2$	$2 > i$	$15 + a < 16$	$19 - a > 15$	$15 - a > 14$
$i < 4$	$3 > u$	$6 + a < 10$	$5 - a > 2$	$18 - a > 15$

㉘	㉙	㉚	㉛
$4 + x = 7$	$x + 3 = 7$	$8 - x = 4$	$x - 3 = 5$
$6 + x = 10$	$x + 3 = 12$	$12 - x = 8$	$x - 4 = 16$
$14 + x = 17$	$x + 8 = 20$	$19 - x = 13$	$x - 5 = 6$
$8 + x = 12$	$x + 20 = 80$	$90 - x = 40$	$x - 20 = 50$

Länge		
Zentimeter		Meter
100 cm	=	1 m

Geld		
Pfennig		Mark
100 Pf	=	1 M

① Miß die Länge bei folgenden Strecken!



Zeige am Tafellineal oder Meßband die folgenden Längen!

② 4 cm, 40 cm, 70 cm, 20 cm, 100 cm, ③ 17 cm, 71 cm, 84 cm, 1 m

Zeichne Strecken in der angegebenen Länge!

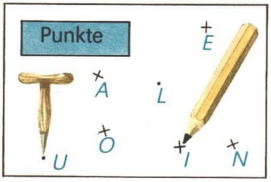
④ 6 cm, 2 cm, 13 cm, 5 cm, 1 cm ⑤ 10 cm, 3 cm, 8 cm, 4 cm, 7 cm

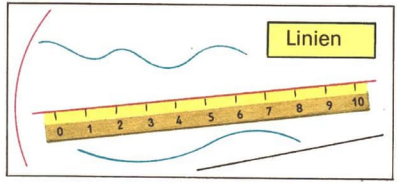
⑥	⑦	⑧	⑨
5 m + 4 m	16 M − 6 M	30 cm + 40 cm	20 Pf + 5 Pf
12 m − 3 m	19 M − 7 M	60 cm − 20 cm	70 Pf + 4 Pf
7 m + 6 m	14 M − 3 M	10 cm + 50 cm	30 Pf + 8 Pf
9 m − 7 m	20 M − 8 M	80 cm − 40 cm	50 Pf + 6 Pf
2 m + 8 m	15 M − 2 M	50 cm + 50 cm	90 Pf + 10 Pf

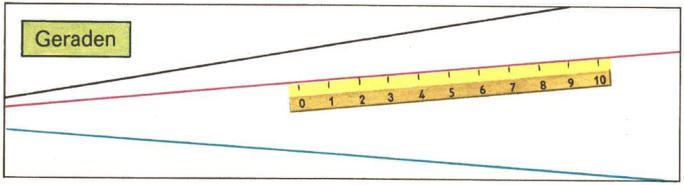
⑩ 60 Pioniere und 7 Lehrer wollen ins Ferienlager fahren.
Wieviel Plätze müssen bestellt werden?

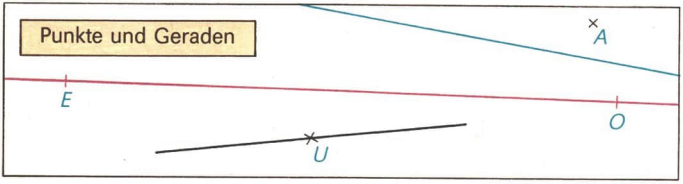
⑪ In einem Lager sind 70 Pioniere. 40 davon sind Mädchen.
Wieviel Jungen sind im Lager?

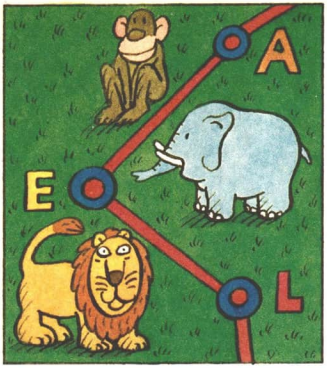
⑫ In jedem Schlafraum stehen 10 Betten.
Das Lager hat 8 Schlafräume.
Wieviel Pioniere können zu gleicher Zeit die Ferien hier verbringen?


Punkte
A
L
E
O
I
N
U

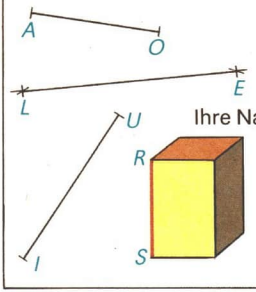

Linien
0 1 2 3 4 5 6 7 8 9 10


Geraden
0 1 2 3 4 5 6 7 8 9 10


Punkte und Geraden
A
E
O
U



Strecken



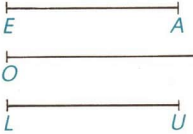
Ihre Namen

$\overline{AO}$
$\overline{LE}$
$\overline{IU}$
$\overline{RS}$

① Zeige Strecken im Klassenzimmer!

② Zeichne 3 Strecken $\overline{LM}$, $\overline{EF}$, $\overline{NU}$!

Vergleichen von Strecken

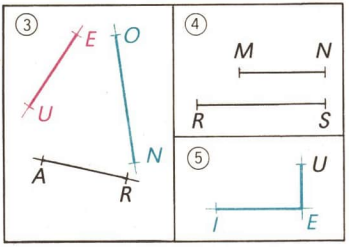


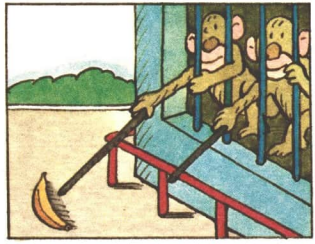
$\overline{EA}$ ist kürzer als $\overline{OI}$.

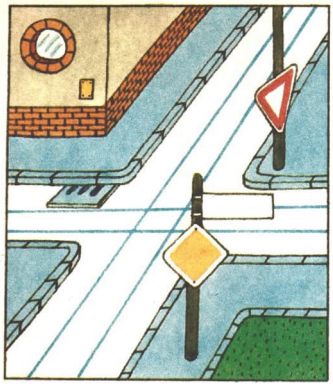
$\overline{OI}$ ist länger als $\overline{LU}$.

$\overline{EA}$ und $\overline{LU}$ sind gleich lang.

Vergleiche!

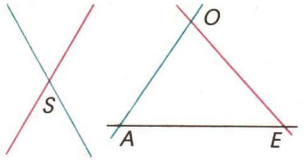






Geraden, die

einander schneiden

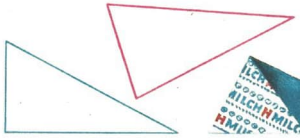


① Zeige auf dem Straßenbild Geraden, die einander schneiden!

Dreiecke

② Suche auf dem Straßenbild Dreiecke!

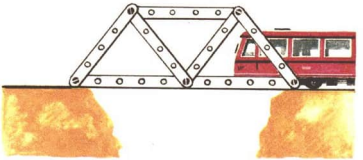
③ Zeichne mit der Schablone 3 Dreiecke!



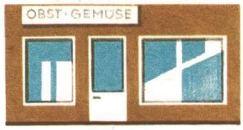
④ Lege mit Stäbchen 2 Dreiecke!

⑤ Verbinde 3 Flachstäbe so, daß ein Dreieck entsteht!

⑥ Wie viele Dreiecke erkennst du an dieser Brücke?



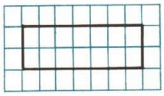
Rechtecke

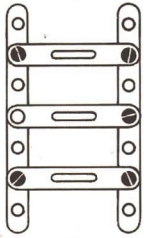


① Suche auf dem Straßenbild Rechtecke!

② Lege mit Stäbchen ein Rechteck!

③ Zeichne im Rechenheft 2 Rechtecke!





④ Zeichne mit der Schablone 6 Rechtecke!

⑤ Miß die Länge der Rechteckseiten!

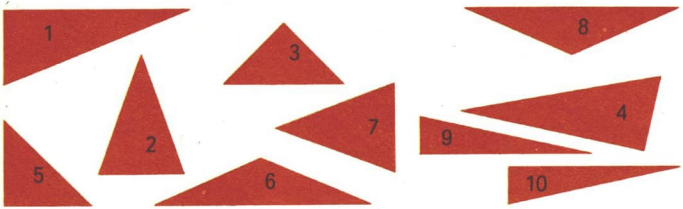
Die gegenüberliegenden Seiten eines Rechtecks sind gleich lang.

Kreise

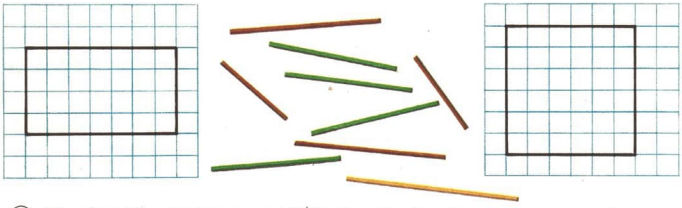
⑥ Suche auf dem Straßenbild Kreise!

⑦ Zeichne mit der Schablone 3 Kreise!

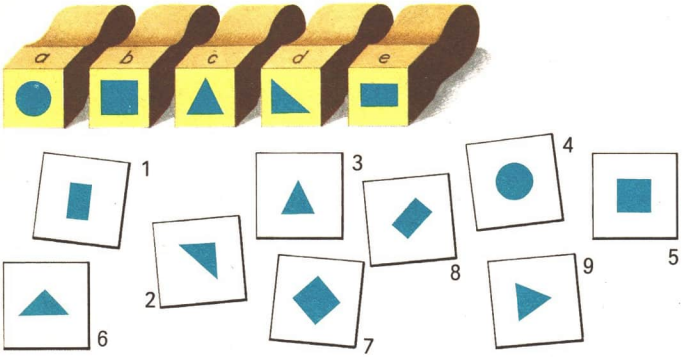
① Aus den folgenden Dreiecken kann man Rechtecke legen.
Welche Dreiecke gehören dabei jeweils zusammen?



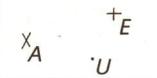
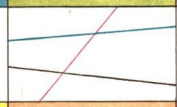
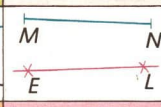
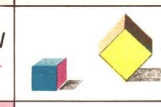
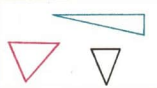
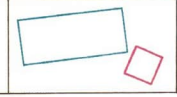
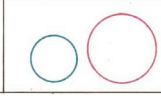
② Mit welchen dieser Stäbchen kannst du die beiden
Rechtecke legen?



③ Jörg hat für ein Legespiel Kärtchen bedruckt.
Welchen Stempel hat er dabei jeweils verwendet?



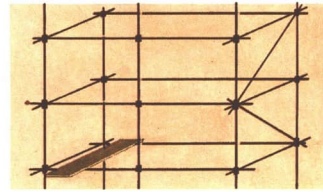
Was wir bereits wissen und können

Punkte	Geraden	Strecken	Würfel
			
Dreiecke	**Rechtecke**	**Kreise**	**Kugeln**
			

Zeige in diesem Bild

① Punkte, ② Strecken,

③ Dreiecke, ④ Rechtecke!



Zeichne

⑤ eine Strecke $\overline{EA}$,

⑥ eine Strecke $\overline{RS}$, die länger ist als $\overline{EA}$!

⑦ Wieviel Dreiecke, Rechtecke und Kreise müßtest du aus Buntpapier ausschneiden, um die einzelnen Bilder legen zu können?

⑧ Zeichne auf Gitterpapier Rechtecke, Dreiecke und Kreise! Male sie aus! Schneide sie aus! Lege Bilder!

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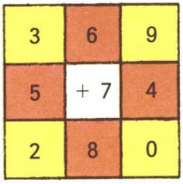
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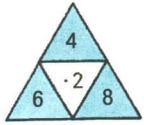
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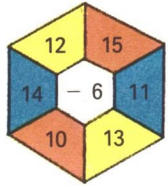
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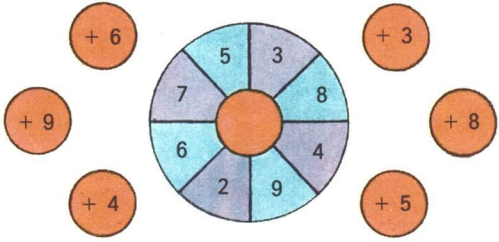
+ 6
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2 9
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+ 8
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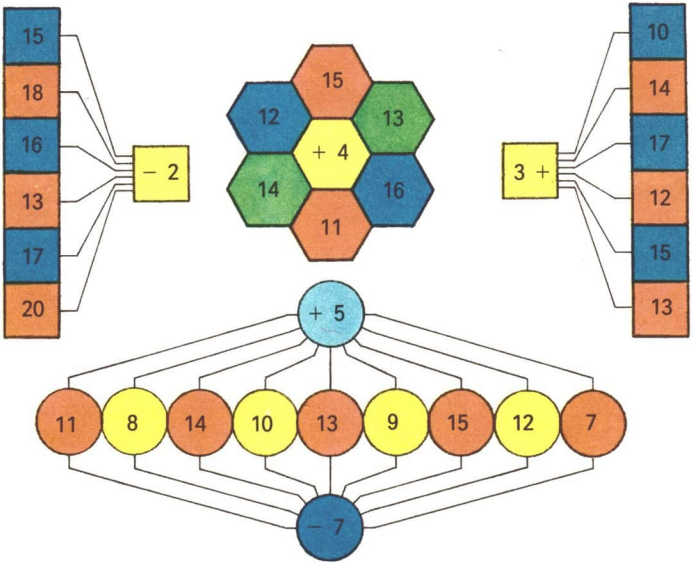
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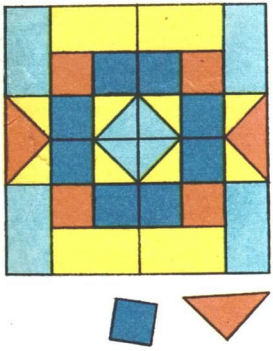

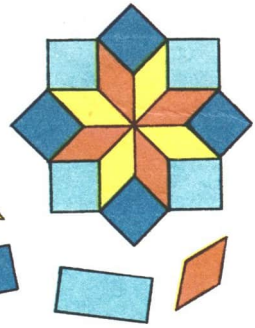

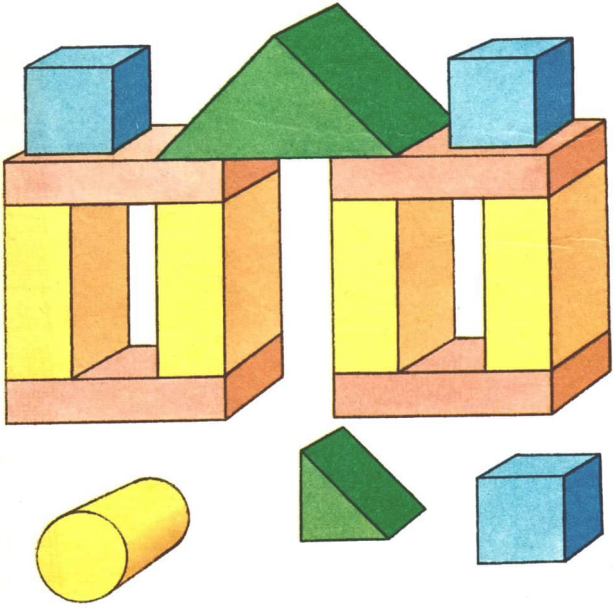

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