

ESTDA A 5200

m...



Methodisch-geordnete Aufgaben

für das

Zafelrechnen.

Von

Friedr. Wilh. Kellner,
wissenschaftlichem Lehrer an der Kreisschule zu Reval.

Erstes Heft.

Die Zahlenkreise von 1 bis 10 und von 10 bis 100.
(Die vier Species mit gleichbenannten Zahlen.)

Fünfte Auflage.



Reval, 1887.

Verlag von Franz Kluge.



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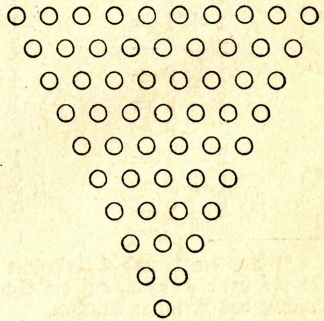
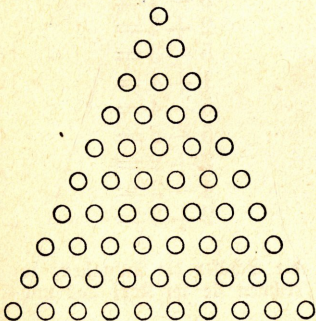
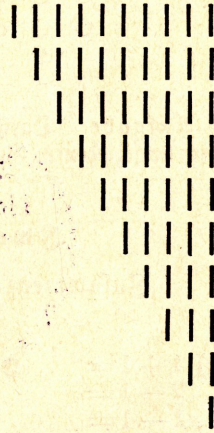
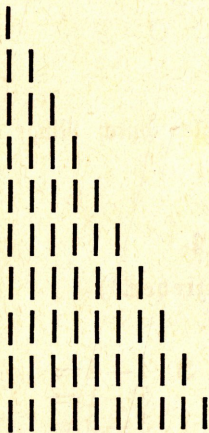
Erste Stufe.

Das Rechnen im Zahlenkreise von 1 bis 10.

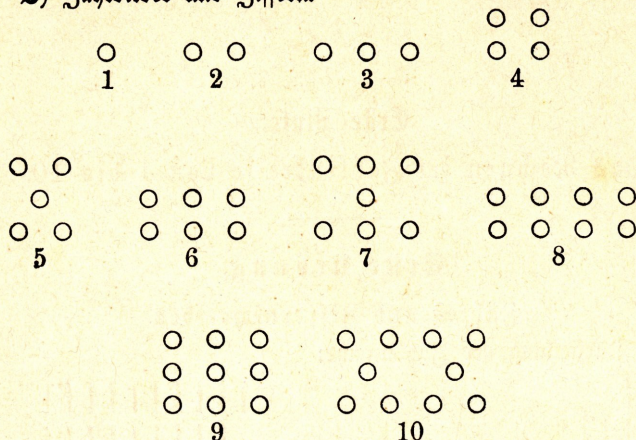
Erste Übung.

Zählen und Ziffernschreiben.

1) Darstellung der Zahlenreihe:



2) Zahlbilder und Ziffern.



3) Aufgabe. Darstellung der Zahlen durch Ringe oder Punkte in verschiedenen Gruppierungen.

Zweite Übung.

Zusammenzählen und Abziehen.*)

I.

1) $1 + 1 =$
 $2 - 1 =$
 $1 - 1 =$
 $2 - 2 =$
 $2 + 1 =$
 $3 - 1 =$
 $1 + 2 =$
 $3 - 2 =$
 $3 - 3 =$
 $2 - 1 =$
 $1 + 2 =$
 $3 - 2 =$

2) $3 + 1 =$
 $4 - 1 =$
 $2 + 2 =$
 $4 - 2 =$
 $1 + 3 =$
 $4 - 3 =$
 $4 - 4 =$
 $1 + 2 =$
 $4 - 2 =$
 $1 + 3 =$
 $3 - 2 =$
 $2 + 2 =$

3) $4 + 1 =$
 $5 - 1 =$
 $3 + 2 =$
 $5 - 2 =$
 $2 + 3 =$
 $5 - 3 =$
 $1 + 4 =$
 $5 - 4 =$
 $5 - 5 =$
 $2 + 2 =$
 $4 - 3 =$
 $2 + 3 =$

*) Auf der 1. und 2. Lehrstufe schreiben die Schüler die Aufgaben, so wie sie hier stehen, auf die Schiefertafel, rechnen sie im Kopf aus und schreiben das Resultat daneben.

4) $5 + 1 =$
 $6 - 1 =$
 $4 + 2 =$
 $6 - 2 =$
 $3 + 3 =$
 $6 - 3 =$
 $2 + 4 =$
 $6 - 4 =$
 $1 + 5 =$
 $6 - 5 =$
 $6 - 6 =$
 $2 + 3 =$
 $5 - 2 =$
 $4 - 2 =$
 $2 + 4 =$
 $4 - 3 =$

5) $6 + 1 =$
 $7 - 1 =$
 $5 + 2 =$
 $7 - 2 =$
 $4 + 3 =$
 $7 - 3 =$
 $3 + 4 =$
 $7 - 4 =$
 $2 + 5 =$
 $7 - 5 =$
 $1 + 6 =$
 $7 - 6 =$
 $2 + 3 =$
 $6 - 3 =$
 $4 - 2 =$
 $3 + 4 =$

6) $7 + 1 =$
 $8 - 1 =$
 $6 + 2 =$
 $8 - 2 =$
 $5 + 3 =$
 $8 - 3 =$
 $4 + 4 =$
 $8 - 4 =$
 $3 + 5 =$
 $8 - 5 =$
 $2 + 6 =$
 $8 - 6 =$
 $1 + 7 =$
 $8 - 7 =$
 $2 + 5 =$
 $7 - 4 =$

7) $8 + 1 =$
 $9 - 1 =$
 $7 + 2 =$
 $9 - 2 =$
 $6 + 3 =$
 $9 - 3 =$
 $5 + 4 =$
 $9 - 4 =$
 $4 + 5 =$
 $9 - 5 =$
 $3 + 6 =$
 $9 - 6 =$
 $2 + 7 =$
 $9 - 7 =$
 $1 + 8 =$
 $9 - 8 =$
 $3 + 5 =$
 $7 - 4 =$
 $3 + 4 =$
 $8 - 5 =$

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

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

II.

$$\begin{array}{l}
 \mathbf{1)} \quad 1 + 2 = \\
 2 + 2 = \\
 2 - 2 = \\
 3 + 2 = \\
 3 - 2 = \\
 4 + 2 = \\
 4 - 2 = \\
 5 + 2 = \\
 5 - 2 = \\
 6 + 2 = \\
 6 - 2 = \\
 7 + 2 = \\
 7 - 2 = \\
 8 + 2 = \\
 8 - 2 = \\
 9 - 2 = \\
 10 - 2 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{4)} \quad 1 + 5 = \\
 2 + 5 = \\
 3 + 5 = \\
 4 + 5 = \\
 5 + 5 = \\
 6 - 5 = \\
 7 - 5 = \\
 8 - 5 = \\
 9 - 5 = \\
 10 - 5 = \\
 2 + 5 = \\
 4 + 5 = \\
 8 - 5 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{2)} \quad 1 + 3 = \\
 2 + 3 = \\
 3 + 3 = \\
 3 - 3 = \\
 4 + 3 = \\
 4 - 3 = \\
 5 + 3 = \\
 5 - 3 = \\
 6 + 3 = \\
 6 - 3 = \\
 7 + 3 = \\
 7 - 3 = \\
 8 - 3 = \\
 9 - 3 = \\
 10 - 3 = \\
 6 + 3 = \\
 7 - 3 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{5)} \quad 1 + 6 = \\
 2 + 6 = \\
 3 + 6 = \\
 4 + 6 = \\
 6 - 6 = \\
 7 - 6 = \\
 8 - 6 = \\
 9 - 6 = \\
 10 - 6 = \\
 4 + 6 = \\
 8 - 6 = \\
 2 + 6 = \\
 9 - 6 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{3)} \quad 1 + 4 = \\
 2 + 4 = \\
 3 + 4 = \\
 4 + 4 = \\
 4 - 4 = \\
 5 + 4 = \\
 5 - 4 = \\
 6 + 4 = \\
 6 - 4 = \\
 7 - 4 = \\
 8 - 4 = \\
 9 - 4 = \\
 10 - 4 = \\
 6 + 4 = \\
 7 - 4 = \\
 3 + 4 = \\
 8 - 4 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{6)} \quad 1 + 7 = \\
 2 + 7 = \\
 3 + 7 = \\
 7 - 7 = \\
 8 - 7 = \\
 9 - 7 = \\
 10 - 7 = \\
 1 + 8 = \\
 2 + 8 = \\
 9 - 8 = \\
 10 - 8 = \\
 1 + 9 = \\
 10 - 9 =
 \end{array}$$

III.

$$\begin{array}{l}
 \mathbf{1)} \quad 1 + 1 = \\
 1 - 1 = \\
 1 + 2 = \\
 1 + 3 = \\
 1 + 4 = \\
 1 + 5 = \\
 1 + 6 = \\
 1 + 7 = \\
 1 + 8 = \\
 1 + 9 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{2)} \quad 2 + 1 = \\
 2 - 1 = \\
 2 + 2 = \\
 2 - 2 = \\
 2 + 3 = \\
 2 + 4 = \\
 2 + 5 = \\
 2 + 6 = \\
 2 + 7 = \\
 2 + 8 =
 \end{array}$$

$$\begin{array}{l}
 \mathbf{3)} \quad 3 + 1 = \\
 3 - 1 = \\
 3 + 2 = \\
 3 - 2 = \\
 3 + 3 = \\
 3 - 3 = \\
 3 + 4 = \\
 3 + 5 = \\
 3 + 6 = \\
 3 + 7 =
 \end{array}$$

4) $4 + 1 =$
 $4 - 1 =$
 $4 + 2 =$
 $4 - 2 =$
 $4 + 3 =$
 $4 - 3 =$
 $4 + 4 =$
 $4 - 4 =$
 $4 + 5 =$
 $4 + 6 =$

5) $5 + 1 =$
 $5 - 1 =$
 $5 + 2 =$
 $5 - 2 =$
 $5 + 3 =$
 $5 - 3 =$
 $5 + 4 =$
 $5 - 4 =$
 $5 + 5 =$
 $5 - 5 =$

6) $6 + 1 =$
 $6 - 1 =$
 $6 + 2 =$
 $6 - 2 =$
 $6 + 3 =$
 $6 - 3 =$
 $6 + 4 =$
 $6 - 4 =$
 $6 - 5 =$
 $6 - 6 =$

7) $7 + 1 =$
 $7 - 1 =$
 $7 + 2 =$
 $7 - 2 =$
 $7 + 3 =$
 $7 - 3 =$
 $7 - 4 =$
 $7 - 5 =$
 $7 - 6 =$
 $7 - 7 =$

8) $8 + 1 =$
 $8 - 1 =$
 $8 + 2 =$
 $8 - 2 =$
 $8 - 3 =$
 $8 - 4 =$
 $8 - 5 =$
 $8 - 6 =$
 $8 - 7 =$
 $8 - 8 =$

9) $9 + 1 =$
 $9 - 1 =$
 $9 - 2 =$
 $9 - 3 =$
 $9 - 4 =$
 $9 - 5 =$
 $9 - 6 =$
 $9 - 7 =$
 $9 - 8 =$
 $9 - 9 =$

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

IV.

1) $1 + 2 =$
 $3 + 2 =$
 $5 + 2 =$
 $7 + 2 =$

2) $9 - 2 =$
 $7 - 2 =$
 $5 - 2 =$
 $3 - 2 =$

3) $2 + 2 =$
 $4 + 2 =$
 $6 + 2 =$
 $8 + 2 =$

4) $10 - 2 =$
 $8 - 2 =$
 $6 - 2 =$
 $4 - 2 =$

V.

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

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

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

4) $1 + 7 =$
 $9 - 7 =$
 $2 + 8 =$
 $9 - 8 =$
 $1 + 9 =$
 $10 - 9 =$
 $2 + 7 =$
 $8 - 7 =$
 $1 + 8 =$
 $10 - 8 =$
 $3 + 7 =$
 $10 - 7 =$
 $9 - 9 =$
 $10 - 5 =$

- | | | | |
|---------------------|---------------------|----------------------|----------------------|
| 5) $1 + 3 =$ | 6) $8 + 2 =$ | 7) $10 - 2 =$ | 8) $10 - 6 =$ |
| $4 + 4 =$ | $3 + 4 =$ | $6 - 3 =$ | $8 - 5 =$ |
| $5 + 3 =$ | $2 + 7 =$ | $4 - 2 =$ | $9 - 7 =$ |
| $9 + 1 =$ | $6 + 3 =$ | $9 - 5 =$ | $8 - 3 =$ |
| $4 + 2 =$ | $4 + 1 =$ | $8 - 4 =$ | $10 - 7 =$ |
| $7 + 3 =$ | $2 + 5 =$ | $10 - 3 =$ | $8 - 6 =$ |
| $5 + 2 =$ | $4 + 6 =$ | $7 - 1 =$ | $9 - 3 =$ |
| $1 + 4 =$ | $1 + 8 =$ | $3 - 3 =$ | $9 - 6 =$ |
| $8 + 2 =$ | $3 + 7 =$ | $5 - 4 =$ | $10 - 8 =$ |
| $5 + 5 =$ | $4 + 5 =$ | $9 - 8 =$ | $9 - 4 =$ |
| $2 + 6 =$ | $2 + 8 =$ | $10 - 5 =$ | $6 - 6 =$ |
| $3 + 4 =$ | $6 + 2 =$ | $9 - 2 =$ | $8 - 7 =$ |
| $1 + 8 =$ | $2 + 4 =$ | $6 - 5 =$ | $10 - 9 =$ |
| $6 + 4 =$ | $1 + 9 =$ | $10 - 4 =$ | $8 - 3 =$ |

VI.

- | | | | |
|---------------------|---------------------|----------------------|---------------------|
| 1) $7 - 5 =$ | 2) $8 - 5 =$ | 3) $10 - 8 =$ | 4) $5 + 4 =$ |
| $2 + 3 =$ | $10 - 6 =$ | $7 - 7 =$ | $1 + 2 =$ |
| $7 + 1 =$ | $8 + 1 =$ | $1 + 5 =$ | $10 - 6 =$ |
| $8 - 2 =$ | $4 + 4 =$ | $2 + 7 =$ | $5 + 3 =$ |
| $2 + 1 =$ | $5 - 4 =$ | $8 - 7 =$ | $7 + 2 =$ |
| $6 - 4 =$ | $4 + 6 =$ | $10 - 4 =$ | $9 - 9 =$ |
| $3 + 3 =$ | $7 - 3 =$ | $3 + 6 =$ | $7 - 6 =$ |
| $2 - 1 =$ | $8 + 2 =$ | $6 - 3 =$ | $4 + 5 =$ |
| $9 - 3 =$ | $5 + 5 =$ | $3 + 5 =$ | $2 + 8 =$ |
| $3 + 7 =$ | $4 - 2 =$ | $7 - 4 =$ | $10 - 1 =$ |

- | | | | |
|---------------------|---------------------|----------------------|---------------------|
| 5) $2 + 8 =$ | 6) $5 - 2 =$ | 7) $10 - 7 =$ | 8) $4 - 3 =$ |
| $8 - 7 =$ | $3 - 3 =$ | $7 - 5 =$ | $9 - 6 =$ |
| $3 + 4 =$ | $4 + 4 =$ | $5 + 2 =$ | $2 + 6 =$ |
| $4 + 5 =$ | $10 - 2 =$ | $3 + 1 =$ | $7 - 3 =$ |
| $9 - 3 =$ | $8 - 3 =$ | $5 + 5 =$ | $3 + 3 =$ |
| $1 + 7 =$ | $5 + 3 =$ | $2 + 7 =$ | $4 + 6 =$ |
| $10 - 5 =$ | $7 + 2 =$ | $10 - 4 =$ | $10 - 3 =$ |
| $6 + 4 =$ | $9 - 5 =$ | $1 + 9 =$ | $7 - 4 =$ |
| $9 - 4 =$ | $4 + 3 =$ | $3 + 6 =$ | $5 + 3 =$ |
| $10 - 10 =$ | $1 + 8 =$ | $8 - 6 =$ | $6 - 4 =$ |

VII.

- | | | | |
|---------------------|------------|---------------------|-----------|
| 1) $3 = 1 +$ | $8 = 5 +$ | 2) $2 = 1 +$ | $6 = 2 +$ |
| $5 = 1 +$ | $10 = 7 +$ | $5 = 3 +$ | $9 = 1 +$ |
| $7 = 6 +$ | $7 = 3 +$ | $8 = 4 +$ | $7 = 4 +$ |
| $9 = 7 +$ | $4 = 2 +$ | $10 = 8 +$ | $9 = 6 +$ |
| $5 = 2 +$ | $6 = 3 +$ | $7 = 1 +$ | $8 = 2 +$ |

- | | | | |
|----------------------|---------------------|---------------------|---------------------|
| 3) $10 = 5 +$ | 4) $7 = 3 +$ | 5) $4 = 5 -$ | 6) $2 = 8 -$ |
| $8 = 3 +$ | $9 = 4 +$ | $6 = 9 -$ | $3 = 9 -$ |
| $6 = 1 +$ | $10 = 2 +$ | $9 = 10 -$ | $6 = 10 -$ |
| $4 = 2 +$ | $8 = 7 +$ | $6 = 8 -$ | $5 = 7 -$ |
| $9 = 3 +$ | $10 = 4 +$ | $2 = 4 -$ | $4 = 9 -$ |
| $7 = 5 +$ | $9 = 5 +$ | $1 = 6 -$ | $5 = 10 -$ |
| $5 = 2 +$ | $6 = 4 +$ | $3 = 6 -$ | $6 = 9 -$ |
| $10 = 6 +$ | $10 = 1 +$ | $2 = 6 -$ | $2 = 7 -$ |
| $8 = 1 +$ | $9 = 2 +$ | $8 = 10 -$ | $7 = 9 -$ |
| $7 = 2 +$ | $10 = 3 +$ | $5 = 8 -$ | $3 = 8 -$ |
-
- | | | | |
|----------------------|-----------|---------------------|------------|
| 7) $2 = 10 -$ | $3 = 7 -$ | 8) $5 = 6 -$ | $3 = 10 -$ |
| $1 = 7 -$ | $0 = 4 -$ | $0 = 7 -$ | $4 = 7 -$ |
| $2 = 9 -$ | $1 = 8 -$ | $7 = 10 -$ | $5 = 8 -$ |
| $2 = 8 -$ | $5 = 9 -$ | $1 = 9 -$ | $1 = 10 -$ |
| $4 = 10 -$ | $4 = 8 -$ | $2 = 7 -$ | $2 = 5 -$ |

VIII.

- | | | |
|-------------------------|-------------------------|-------------------------|
| 1) $1 + 1 - 1 =$ | 2) $5 - 1 - 2 =$ | 3) $6 - 1 - 2 =$ |
| $1 + 2 - 1 =$ | $5 - 2 - 2 =$ | $6 - 2 - 3 =$ |
| $2 + 1 + 1 =$ | $5 - 3 - 1 =$ | $6 - 4 - 1 =$ |
| $2 + 2 - 1 =$ | $4 + 1 + 1 =$ | $5 + 1 + 1 =$ |
| $3 + 1 - 2 =$ | $4 + 2 - 1 =$ | $5 + 2 - 1 =$ |
| $1 + 3 - 1 =$ | $3 + 2 + 1 =$ | $4 + 2 + 1 =$ |
| $4 - 1 - 2 =$ | $3 + 3 - 2 =$ | $4 + 3 - 2 =$ |
| $4 - 3 + 2 =$ | $2 + 2 + 2 =$ | $3 + 3 + 1 =$ |
| $3 + 1 + 1 =$ | $2 + 4 - 3 =$ | $3 + 4 - 3 =$ |
| $2 + 2 + 1 =$ | $1 + 3 + 2 =$ | $2 + 3 + 2 =$ |
| $3 + 2 - 1 =$ | $1 + 5 + 4 =$ | $2 + 5 - 4 =$ |
| $1 + 4 - 3 =$ | $1 + 4 + 1 =$ | $1 + 4 + 2 =$ |
| $4 + 1 - 2 =$ | $2 + 1 + 3 =$ | $1 + 6 - 5 =$ |
-
- | | | |
|-------------------------|-------------------------|-------------------------|
| 4) $7 - 1 - 2 =$ | 5) $8 - 2 - 3 =$ | 6) $9 - 2 - 4 =$ |
| $7 - 2 - 3 =$ | $8 - 3 - 4 =$ | $9 - 3 - 3 =$ |
| $7 - 3 - 3 =$ | $8 - 4 - 2 =$ | $9 - 5 - 2 =$ |
| $7 - 4 - 2 =$ | $8 - 5 + 2 =$ | $9 - 7 + 1 =$ |
| $7 - 5 - 1 =$ | $8 - 6 + 4 =$ | $9 - 8 + 3 =$ |
| $6 + 1 + 1 =$ | $8 - 7 + 6 =$ | $9 - 6 + 4 =$ |
| $6 + 2 - 1 =$ | $6 + 2 + 2 =$ | $7 + 2 + 1 =$ |
| $5 + 2 + 1 =$ | $6 + 3 - 2 =$ | $7 + 3 - 2 =$ |

$$\begin{aligned}
 7) \quad & 5 + 3 - 2 = \\
 & 4 + 2 + 2 = \\
 & 4 + 4 - 3 = \\
 & 3 + 3 + 2 = \\
 & 3 + 5 - 4 = \\
 & 2 + 4 + 2 = \\
 & 2 + 6 - 5 = \\
 & 1 + 7 - 6 =
 \end{aligned}$$

$$\begin{aligned}
 8) \quad & 5 + 2 + 2 = \\
 & 5 + 4 - 3 = \\
 & 4 + 3 + 2 = \\
 & 3 + 6 - 4 = \\
 & 3 + 3 + 3 = \\
 & 2 + 7 - 5 = \\
 & 1 + 5 + 3 = \\
 & 1 + 8 - 6 =
 \end{aligned}$$

$$\begin{aligned}
 9) \quad & 6 + 2 + 2 = \\
 & 6 + 4 - 3 = \\
 & 5 + 3 + 2 = \\
 & 5 + 5 - 4 = \\
 & 4 + 4 + 2 = \\
 & 4 + 6 - 5 = \\
 & 3 + 7 - 6 = \\
 & 2 + 8 - 7 =
 \end{aligned}$$

IX.

$$\begin{aligned}
 1) \quad & 3 + 4 + 3 = \\
 & 8 - 4 - 4 = \\
 & 4 + 1 - 3 = \\
 & 2 + 5 + 2 = \\
 10) \quad & -4 - 2 = \\
 & 3 + 6 - 4 = \\
 & 2 + 1 + 3 = \\
 & 6 - 2 - 2 = \\
 & 7 + 3 - 4 =
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 1 + 6 + 3 = \\
 & 9 - 6 - 1 = \\
 & 5 + 4 - 4 = \\
 & 2 + 3 + 4 = \\
 10) \quad & -5 - 3 = \\
 & 1 + 7 - 5 = \\
 & 2 + 5 + 1 = \\
 & 8 - 4 - 3 = \\
 & 3 + 6 - 4 =
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 2 + 4 + 3 = \\
 & 8 - 5 - 2 = \\
 & 6 + 4 - 5 = \\
 & 1 + 2 + 7 = \\
 10) \quad & -6 - 2 = \\
 & 3 + 5 - 7 = \\
 & 4 + 4 + 1 = \\
 & 9 - 3 - 3 = \\
 & 2 + 3 - 4 =
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 1 + 2 + 3 = \\
 & 4 - 2 - 1 = \\
 & 5 - 3 + 8 = \\
 & 2 + 7 - 6 = \\
 & 7 - 4 + 2 = \\
 & 6 - 3 + 7 = \\
 & 2 + 7 - 8 = \\
 & 9 - 7 + 6 = \\
 & 10 - 6 + 3 =
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 9 - 4 + 2 = \\
 & 2 + 6 - 4 = \\
 & 7 - 4 + 5 = \\
 & 8 - 3 + 2 = \\
 & 6 - 4 + 3 = \\
 & 3 + 3 - 4 = \\
 & 1 + 9 - 5 = \\
 & 10 - 6 + 4 = \\
 & 9 - 7 + 7 =
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 8 - 3 + 4 = \\
 & 5 + 4 - 7 = \\
 & 8 - 4 + 6 = \\
 & 6 + 3 - 8 = \\
 & 9 - 4 - 2 = \\
 & 3 + 7 - 6 = \\
 & 8 - 5 + 6 = \\
 & 2 + 8 - 6 = \\
 & 10 - 7 + 5 =
 \end{aligned}$$

X.

$$\begin{aligned}
 1) \quad & 2 + 3 + 2 + 1 = \\
 & 6 + 1 + 2 + 1 = \\
 & 8 - 2 - 2 - 2 = \\
 & 3 + 3 + 3 - 4 = \\
 & 3 + 6 - 5 + 4 = \\
 & 7 + 1 + 2 - 5 = \\
 & 5 - 3 - 1 - 1 = \\
 & 1 + 2 + 3 + 4 = \\
 & 10 - 3 - 4 - 2 =
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 8 + 1 + 1 - 9 = \\
 & 3 + 2 + 4 - 8 = \\
 & 5 + 1 + 3 - 4 = \\
 & 3 + 7 - 6 - 2 = \\
 & 8 - 5 + 3 - 5 = \\
 & 9 + 1 - 4 - 4 = \\
 & 4 + 5 - 7 + 5 = \\
 & 4 + 3 + 3 - 8 = \\
 & 10 - 9 + 8 - 2 =
 \end{aligned}$$

3) $4 + 4 + 2 - 3 =$
 $6 - 4 + 8 - 9 =$
 $8 - 3 + 5 - 6 =$
 $2 + 7 - 7 + 6 =$
 $9 - 6 + 5 - 4 =$
 $2 + 3 + 4 - 5 =$
 $-3 + 4 + 3 - 7 =$
 $4 + 5 - 6 + 7 =$
 $5 + 5 - 8 + 6 =$

4) $8 - 3 + 5 - 6 =$
 $4 + 3 - 5 + 8 =$
 $6 - 5 + 8 - 7 =$
 $3 + 5 - 2 - 5 =$
 $9 - 3 - 3 - 3 =$
 $5 + 4 - 8 + 7 =$
 $7 + 2 - 4 + 5 =$
 $1 + 7 + 2 - 6 =$
 $3 + 5 - 6 + 7 =$

XI.

1) $6 = 5 + 4 - ?$
 $3 = 4 + 5 - ?$
 $5 = 4 + 4 - ?$
 $5 = 2 + 7 - ?$
 $2 = 3 + 3 - ?$
 $4 = 5 + 5 - ?$
 $3 = 1 + 9 - ?$
 $2 = 2 + 7 - ?$

2) $4 = 2 + 6 - ?$
 $3 = 1 + 8 - ?$
 $5 = 6 + 3 - ?$
 $4 = 3 + 6 - ?$
 $2 = 3 + 5 - ?$
 $5 = 3 + 4 - ?$
 $1 = 4 + 4 - ?$
 $3 = 3 + 5 - ?$

3) $9 = 6 - 4 + ?$
 $6 = 5 - 2 + ?$
 $9 = 8 - 5 + ?$
 $7 = 9 - 6 + ?$
 $4 = 8 - 7 + ?$
 $5 = 6 - 4 + ?$
 $8 = 9 - 5 + ?$
 $8 = 7 - 4 + ?$

4) $10 = 5 - 2 + ?$
 $10 = 7 - 3 + ?$
 $10 = 4 - 2 + ?$
 $10 = 8 - 1 + ?$
 $10 = 6 - 2 + ?$
 $10 = 9 - 8 + ?$
 $10 = 8 - 3 + ?$
 $10 = 9 - 3 + ?$

Dritte Übung.

Vervielfältigen, Enthaltensein und Theilen.

I.

1) $1 \times 1 =$
 $2 \times 1 =$
 $1 \times 2 =$
 $3 \times 1 =$
 $1 \times 3 =$
 $4 \times 1 =$
 $1 \times 4 =$
 $2 \times 2 =$
 $5 \times 1 =$
 $1 \times 5 =$

2) $6 \times 1 =$
 $1 \times 6 =$
 $3 \times 2 =$
 $2 \times 3 =$
 $7 \times 1 =$
 $1 \times 7 =$
 $8 \times 1 =$
 $1 \times 8 =$
 $4 \times 2 =$
 $2 \times 4 =$

3) $9 \times 1 =$
 $1 \times 9 =$
 $3 \times 3 =$
 $10 \times 1 =$
 $1 \times 10 =$
 $5 \times 2 =$
 $2 \times 5 =$
 $2 \times 3 =$
 $2 \times 2 =$
 $5 \times 1 =$

4) $7 \times 1 =$
 $2 \times 5 =$
 $2 \times 2 =$
 $8 \times 1 =$
 $3 \times 3 =$
 $10 \times 1 =$
 $4 \times 2 =$
 $1 \times 6 =$
 $2 \times 3 =$
 $1 \times 2 =$

5) $3 \times 2 =$	6) $2 \times 5 =$	7) $9 \times 1 =$	8) $3 \times 3 =$
$1 \times 6 =$	$2 \times 2 =$	$2 \times 4 =$	$5 \times 2 =$
$4 \times 1 =$	$4 \times 2 =$	$3 \times 2 =$	$4 \times 2 =$
$2 \times 3 =$	$3 \times 3 =$	$1 \times 8 =$	$2 \times 3 =$
$7 \times 1 =$	$5 \times 2 =$	$2 \times 3 =$	$2 \times 5 =$

II.

1) $3 = 1 \times$	2) $1 = 1 \times$	3) $6 = 6 \times$	4) $9 = 1 \times$
$8 = 8 \times$	$8 = 4 \times$	$8 = 2 \times$	$6 = 3 \times$
$7 = 1 \times$	$6 = 2 \times$	$6 = 3 \times$	$9 = 3 \times$
$4 = 4 \times$	$10 = 5 \times$	$4 = 2 \times$	$8 = 4 \times$
$6 = 1 \times$	$6 = 3 \times$	$10 = 2 \times$	$6 = 2 \times$
$4 = 2 \times$	$4 = 4 \times$	$7 = 7 \times$	$4 = 2 \times$
$9 = 9 \times$	$9 = 3 \times$	$6 = 2 \times$	$8 = 2 \times$
$10 = 5 \times$	$5 = 5 \times$	$9 = 3 \times$	$10 = 2 \times$

III. *)

1) $1 \text{ in } 1 =$	2) $1 \text{ in } 6 =$	3) $1 \text{ in } 9 =$	4) $1 \text{ in } 7 =$
$1 \text{ in } 2 =$	$6 \text{ in } 6 =$	$9 \text{ in } 9 =$	$8 \text{ in } 8 =$
$2 \text{ in } 2 =$	$2 \text{ in } 6 =$	$3 \text{ in } 9 =$	$1 \text{ in } 3 =$
$1 \text{ in } 3 =$	$3 \text{ in } 6 =$	$1 \text{ in } 10 =$	$2 \text{ in } 8 =$
$3 \text{ in } 3 =$	$1 \text{ in } 7 =$	$10 \text{ in } 10 =$	$6 \text{ in } 6 =$
$1 \text{ in } 4 =$	$7 \text{ in } 7 =$	$2 \text{ in } 10 =$	$1 \text{ in } 5 =$
$4 \text{ in } 4 =$	$1 \text{ in } 8 =$	$5 \text{ in } 10 =$	$2 \text{ in } 4 =$
$2 \text{ in } 4 =$	$8 \text{ in } 8 =$	$2 \text{ in } 6 =$	$3 \text{ in } 3 =$
$1 \text{ in } 5 =$	$2 \text{ in } 8 =$	$3 \text{ in } 6 =$	$1 \text{ in } 9 =$
$5 \text{ in } 5 =$	$4 \text{ in } 8 =$	$2 \text{ in } 8 =$	$2 \text{ in } 10 =$
5) $2 \text{ in } 2 =$	6) $3 \text{ in } 3 =$	7) $3 \text{ in } 6 =$	8) $2 \text{ in } 6 =$
$2 \text{ in } 4 =$	$3 \text{ in } 6 =$	$1 \text{ in } 4 =$	$1 \text{ in } 9 =$
$2 \text{ in } 6 =$	$3 \text{ in } 9 =$	$2 \text{ in } 10 =$	$3 \text{ in } 9 =$
$2 \text{ in } 8 =$	$4 \text{ in } 8 =$	$7 \text{ in } 7 =$	$4 \text{ in } 8 =$
$2 \text{ in } 10 =$	$5 \text{ in } 10 =$	$2 \text{ in } 4 =$	$6 \text{ in } 6 =$

IV.

1) $1 \times 6 =$	2) $1 \text{ in } 1 =$	3) $2 \times 5 =$	4) $5 \text{ in } 10 =$
$1 \text{ in } 2 =$	$1 \times 9 =$	$8 \text{ in } 8 =$	$3 \times 2 =$
$3 \times 3 =$	$2 \text{ in } 6 =$	$3 \times 3 =$	$1 \text{ in } 7 =$
$3 \text{ in } 6 =$	$3 \times 2 =$	$2 \text{ in } 8 =$	$2 \times 4 =$
$4 \times 1 =$	$3 \text{ in } 9 =$	$2 \times 2 =$	$4 \text{ in } 8 =$
$1 \text{ in } 3 =$	$8 \times 1 =$	$3 \text{ in } 6 =$	$9 \times 1 =$
$2 \times 4 =$	$2 \text{ in } 4 =$	$4 \times 2 =$	$3 \text{ in } 9 =$
$2 \text{ in } 2 =$	$10 \times 1 =$	$2 \text{ in } 10 =$	$5 \times 2 =$

*) Aufgaben wie: $2 \text{ in } 6 = 3$ sind zu lesen: 2 ist in 6 dreimal enthalten; oder 2 steckt in 6 dreimal.

- 5) 4 in 8 = 1 × 7 = 2 in 10 = 3 × 2 = 4 in 4 = 2 × 5 = 6 in 6 = 8 × 1 =
- 6) 2 × 4 = 2 × 6 = 3 × 3 = 5 in 10 = 3 × 2 = 4 in 8 = 1 × 9 = 3 in 6 =
- 7) 5 in 5 = 4 × 2 = 2 in 8 = 2 × 5 = 3 in 9 = 2 × 2 = 8 in 8 = 10 × 1 =
- 8) 3 × 3 = 4 in 8 = 5 × 2 = 3 in 6 = 2 × 4 = 2 in 6 = 3 × 2 = 2 in 10 =

V. *)

- 1) $\frac{1}{2}$ v. 2 = $\frac{1}{2}$ v. 4 = $\frac{1}{3}$ v. 6 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 10 = $\frac{1}{6}$ v. 3 = $\frac{1}{8}$ v. 6 = $\frac{1}{9}$ v. 9 = $\frac{1}{8}$ v. 8 =
- 2) $\frac{1}{4}$ v. 4 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 5 = $\frac{1}{5}$ v. 10 = $\frac{1}{6}$ v. 6 = $\frac{1}{7}$ v. 7 = $\frac{1}{8}$ v. 8 = $\frac{1}{9}$ v. 9 = $\frac{1}{10}$ v. 10 =
- 3) $\frac{1}{4}$ v. 4 = $\frac{1}{2}$ v. 6 = $\frac{1}{8}$ v. 8 = $\frac{1}{2}$ v. 10 = $\frac{1}{3}$ v. 6 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 5 = $\frac{1}{3}$ v. 9 = $\frac{1}{3}$ v. 10 =
- 4) $\frac{1}{2}$ v. 4 = $\frac{1}{3}$ v. 9 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 5 = $\frac{1}{4}$ v. 4 =
- 5) $\frac{1}{3}$ v. 6 = $\frac{1}{2}$ v. 8 = $\frac{1}{3}$ v. 3 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 10 =
- 6) $\frac{1}{2}$ v. 6 = $\frac{1}{3}$ v. 9 = $\frac{1}{4}$ v. 4 = $\frac{1}{5}$ v. 10 = $\frac{1}{2}$ v. 10 =
- 7) $\frac{1}{2}$ v. 8 = $\frac{1}{3}$ v. 6 = $\frac{1}{4}$ v. 8 = $\frac{1}{5}$ v. 6 = $\frac{1}{2}$ v. 2 =

VI.

- 1) 1 = $\frac{1}{2}$ v. ?
2 = $\frac{1}{2}$ v. ?
3 = $\frac{1}{2}$ v. ?
4 = $\frac{1}{2}$ v. ?
5 = $\frac{1}{2}$ v. ?
1 = $\frac{1}{3}$ v. ?
2 = $\frac{1}{3}$ v. ?
3 = $\frac{1}{3}$ v. ?
2 = $\frac{1}{2}$ v. ?
- 2) 1 = $\frac{1}{4}$ v. ?
2 = $\frac{1}{4}$ v. ?
1 = $\frac{1}{5}$ v. ?
2 = $\frac{1}{5}$ v. ?
1 = $\frac{1}{6}$ v. ?
1 = $\frac{1}{7}$ v. ?
1 = $\frac{1}{8}$ v. ?
1 = $\frac{1}{9}$ v. ?
1 = $\frac{1}{10}$ v. ?
- 3) 3 = $\frac{1}{2}$ v. ?
1 = $\frac{1}{3}$ v. ?
2 = $\frac{1}{2}$ v. ?
1 = $\frac{1}{6}$ v. ?
3 = $\frac{1}{3}$ v. ?
2 = $\frac{1}{4}$ v. ?
1 = $\frac{1}{9}$ v. ?
1 = $\frac{1}{4}$ v. ?
2 = $\frac{1}{3}$ v. ?

*) $\frac{1}{2}$ v. 2; $\frac{1}{3}$ v. 3 u. s. w. wird gelesen: Die Hälfte von 2; der dritte Theil (oder das Drittel) von 3 u. s. w.

$$\begin{aligned}
 4) \quad & 2 = \frac{1}{2} \text{ v. ?} \\
 & 3 = \frac{1}{3} \text{ v. ?} \\
 & 2 = \frac{1}{4} \text{ v. ?} \\
 & 1 = \frac{1}{5} \text{ v. ?} \\
 & 3 = \frac{1}{2} \text{ v. ?} \\
 & 1 = \frac{1}{4} \text{ v. ?}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 2 = \frac{1}{3} \text{ v. ?} \\
 & 4 = \frac{1}{2} \text{ v. ?} \\
 & 2 = \frac{1}{4} \text{ v. ?} \\
 & 3 = \frac{1}{2} \text{ v. ?} \\
 & 2 = \frac{1}{5} \text{ v. ?} \\
 & 3 = \frac{1}{8} \text{ v. ?}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 5 = \frac{1}{2} \text{ v. ?} \\
 & 1 = \frac{1}{6} \text{ v. ?} \\
 & 1 = \frac{1}{9} \text{ v. ?} \\
 & 2 = \frac{1}{5} \text{ v. ?} \\
 & 2 = \frac{1}{2} \text{ v. ?} \\
 & 2 = \frac{1}{4} \text{ v. ?}
 \end{aligned}$$

VII.

$$\begin{array}{lll}
 1) \quad 6 + 3 = & 2) \quad 4 - 4 = & 3) \quad 8 \times 1 = \\
 2 \times 5 = & \frac{1}{2} \text{ v. } 6 = & 5 + 5 = \\
 7 - 2 = & 4 + 6 = & 4 \text{ in } 8 = \\
 2 \text{ in } 6 = & 3 \times 3 = & 10 - 6 = \\
 3 + 5 = & 4 - 3 = & 2 \times 4 = \\
 4 \times 2 = & 3 \text{ in } 9 = & 3 + 6 = \\
 10 - 5 = & 3 + 7 = & \frac{1}{2} \text{ v. } 10 = \\
 \frac{1}{3} \text{ v. } 6 = & 2 \times 2 = & 8 - 3 = \\
 2 + 4 = & 9 - 7 = & 5 \times 2 = \\
 1 \times 9 = & \frac{1}{4} \text{ v. } 8 = & 7 + 2 = \\
 6 - 3 = & 4 + 4 = & 2 \text{ in } 10 = \\
 2 \text{ in } 4 = & 3 \times 2 = & 9 - 4 = \\
 & & 4) \quad 2 \text{ in } 8 = \\
 & & 6 - 5 = \\
 & & 2 \times 5 = \\
 & & 4 + 3 = \\
 & & 3 \text{ in } 3 = \\
 & & 7 - 4 = \\
 & & 4 \times 2 = \\
 & & 2 + 6 = \\
 & & 5 \text{ in } 10 = \\
 & & 9 - 5 = \\
 & & 2 \times 3 = \\
 & & 2 + 8 =
 \end{array}$$

VIII.

$$\begin{array}{lll}
 1) \quad 2 \times 4 + 1 = & 2) \quad 4 \times 2 + 2 = & 3) \quad 3 \times 3 - 2 = \\
 1 \times 5 + 4 = & 2 \times 3 + 2 = & 8 \times 1 - 4 = \\
 2 \times 2 + 5 = & 4 \times 1 + 4 = & 2 \times 5 - 6 = \\
 3 \times 3 + 1 = & 2 \times 2 + 6 = & 4 \times 2 - 5 = \\
 1 \times 7 + 2 = & 6 \times 1 + 3 = & 2 \times 3 - 3 = \\
 3 \times 2 + 2 = & 3 \times 3 + 1 = & 1 \times 9 - 7 = \\
 1 \times 3 + 6 = & 1 \times 4 + 5 = & 5 \times 2 - 8 = \\
 2 \times 1 + 5 = & 3 \times 2 + 3 = & 2 \times 2 - 3 = \\
 4) \quad 10 \times 1 - 9 = & 5) \quad \frac{1}{2} \text{ v. } 4 (+3) = & 6) \quad 2 \text{ in } (3 + 1) = \\
 2 \times 4 - 6 = & \frac{1}{2} \text{ v. } 8 (+5) = & 3 \text{ in } (5 + 4) = \\
 3 \times 3 - 4 = & \frac{1}{3} \text{ v. } 9 (+4) = & 1 \text{ in } (6 - 2) = \\
 1 \times 7 - 4 = & \frac{1}{4} \text{ v. } 4 (+7) = & 4 \text{ in } (6 + 2) = \\
 3 \times 2 - 2 = & \frac{1}{5} \text{ v. } 10 (+8) = & 3 \text{ in } (8 - 2) = \\
 6 \times 1 - 5 = & \frac{1}{3} \text{ v. } 6 (+5) = & 5 \text{ in } (2 + 3) = \\
 2 \times 5 - 7 = & \frac{1}{6} \text{ v. } 6 (+6) = & 2 \text{ in } (3 \times 2) = \\
 4 \times 2 - 3 = & \frac{1}{4} \text{ v. } 2 (+4) = & 4 \text{ in } (2 \times 4) =
 \end{array}$$

Zweite Stufe.

Das Rechnen im Zahlenkreise von 1 bis 100.

Erste Übung.

Zählen.

I.

Schreibe auf:

1) $10 = 10 + 0^*)$	2) $20 = 20 + 0$	3) $30 = 30 + 0$
$11 = 10 + 1$	$21 = 20 + 1$	$31 = 30 + 1$
$12 = 10 + 2$	$22 = 20 + 2$	$32 = 30 + 2$
bis	bis	bis
$20 = 20 + 0$	$30 = 30 + 0$	$40 = 40 + 0$

4) $40 = 40 + 0$	5) $60 = 60 + 0$	6) $90 = 90 + 0$
$41 = 40 + 1$	$61 = 60 + 1$	$91 = 90 + 1$
bis	bis	bis
$50 = 50 + 0$	$70 = 70 + 0$	$100 = 100 + 0$

7) $10 + 9 = 19^{**})$	8) $20 + 9 = 29$	9) $30 + 9 = 39$
$10 + 8 = 18$	$20 + 8 = 28$	$30 + 8 = 38$
bis	bis	bis
$10 + 0 = 10$	$20 + 0 = 20$	$30 + 0 = 30$

10) $50 + 9 = 59$	11) $70 + 9 = 79$	12) $80 + 9 = 89$
$50 + 8 = 58$	$70 + 8 = 78$	$80 + 8 = 88$
bis	bis	bis
$50 + 0 = 50$	$70 + 0 = 70$	$80 + 0 = 80$

*) Die Schüler lesen so vor: 10 Einer = 1 Zehner und 0 Einer;
11 Einer = 1 Zehner und 1 Einer; u. s. w.

***) Die Schüler lesen so vor: 1 Zehner und 9 Einer sind 19 Einer;
1 Zehner und 8 Einer sind 18 Einer; u. s. w.

II.

1) Lies und zerlege:*)

16, 25, 42, 12, 34,
57, 84, 69, 27, 78,
14, 31, 85, 49, 60,
23, 39, 80, 51, 74,
100, 44, 71, 93, 37.

2) Lies und zerlege:

25, 52; 16, 61; 28, 82;
13, 31; 47, 74; 59, 95;
26, 62; 18, 81; 23, 32;
34, 43; 54, 45; 83, 38;
36, 63; 87, 78; 67, 76;

Wie heißen folgende Zahlen? Schreibe sie auf!

- | | | |
|------------------|------------------|------------------|
| 3) 1 Z. + 3 E. = | 4) 5 Z. + 1 E. = | 5) 7 Z. + 0 E. = |
| 7 Z. + 3 E. = | 0 Z. + 7 E. = | 0 Z. + 8 E. = |
| 3 Z. + 0 E. = | 4 Z. + 4 E. = | 1 Z. + 4 E. = |
| 5 Z. + 7 E. = | 9 Z. + 0 E. = | 8 Z. + 8 E. = |
| 4 Z. + 2 E. = | 1 Z. + 8 E. = | 6 Z. + 0 E. = |
| 3 Z. + 9 E. = | 5 Z. + 9 E. = | 3 Z. + 4 E. = |
| 6 Z. + 4 E. = | 2 Z. + 3 E. = | 4 Z. + 3 E. = |
| 2 Z. + 8 E. = | 10 Z. + 0 E. = | 9 Z. + 9 E. = |
| 0 Z. + 6 E. = | 1 Z. + 5 E. = | 1 Z. + 2 E. = |
| 6 Z. + 0 E. = | 5 Z. + 1 E. = | 2 Z. + 1 E. = |

III.

Schreibe unter einander alle Zahlen:

- | | | |
|-------------------|------------------|-------------------|
| 1) von 15 bis 37; | 2) von 25 bis 1; | 3) von 80 bis 69; |
| von 34 bis 52; | von 42 bis 27; | von 25 bis 50; |
| von 48 bis 73; | von 54 bis 38; | von 91 bis 78; |
| von 67 bis 92; | von 61 bis 48; | von 57 bis 82; |
| von 84 bis 100. | von 72 bis 57. | von 100 bis 1. |

Zweite Übung.

Zusammenzählen oder Addieren.

I.

- | | | | |
|------------|------------|------------|------------|
| 1) 9 + 3 = | 2) 8 + 8 = | 3) 7 + 7 = | 4) 6 + 6 = |
| 8 + 5 = | 9 + 4 = | 6 + 5 = | 7 + 9 = |
| 9 + 2 = | 8 + 6 = | 7 + 4 = | 6 + 4 = |
| 8 + 7 = | 9 + 5 = | 6 + 8 = | 7 + 6 = |
| 9 + 9 = | 8 + 9 = | 7 + 5 = | 5 + 7 = |
| 8 + 4 = | 9 + 8 = | 6 + 7 = | 4 + 6 = |
| 9 + 7 = | 8 + 2 = | 7 + 8 = | 5 + 8 = |
| 8 + 3 = | 9 + 6 = | 6 + 9 = | 4 + 7 = |

*) Die Schüler schreiben auf: $16 = 10 + 6$; (darunter) $25 = 20 + 5$
u. s. w. und lesen alsdann vor: 16 E. sind 1 Zhr. und 6 E.; 25 E. sind 2
Zhr. und 5 E. u. s. w.

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

II.

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

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

III.

1) $13 + 4 =$	2) $95 + 3 =$	3) $83 + 2 =$	4) $3 + 12 =$
$22 + 6 =$	$86 + 2 =$	$94 + 4 =$	$4 + 23 =$
$41 + 5 =$	$73 + 5 =$	$75 + 4 =$	$2 + 17 =$
$14 + 5 =$	$61 + 7 =$	$41 + 7 =$	$5 + 32 =$
$27 + 2 =$	$53 + 4 =$	$26 + 3 =$	$6 + 43 =$
$52 + 3 =$	$26 + 3 =$	$32 + 7 =$	$4 + 52 =$
$33 + 6 =$	$12 + 6 =$	$11 + 5 =$	$7 + 91 =$
$25 + 4 =$	$72 + 5 =$	$62 + 6 =$	$5 + 64 =$

$$\begin{array}{lll}
 \mathbf{5)} & 18 + 2 = & \mathbf{6)} & 15 + 2 + 3 = & \mathbf{7)} & 92 + 2 + 6 = \\
 & 25 + 5 = & & 21 + 3 + 6 = & & 34 + 3 + 3 = \\
 & 33 + 7 = & & 44 + 2 + 4 = & & 76 + 1 + 3 = \\
 & 52 + 8 = & & 72 + 1 + 7 = & & 81 + 3 + 6 = \\
 & 44 + 6 = & & 83 + 4 + 3 = & & 20 + 3 + 7 = \\
 & 81 + 9 = & & 61 + 2 + 7 = & & 42 + 5 + 3 = \\
 & 76 + 4 = & & 43 + 6 + 1 = & & 51 + 2 + 7 = \\
 & 97 + 3 = & & 50 + 2 + 8 = & & 93 + 2 + 5 =
 \end{array}$$

$$\begin{array}{llll}
 \mathbf{8)} & 19 + 5 = & \mathbf{9)} & 27 + 7 = & \mathbf{10)} & 85 + 6 = & \mathbf{11)} & 33 + 8 = \\
 & 38 + 7 = & & 46 + 8 = & & 34 + 9 = & & 12 + 9 = \\
 & 59 + 8 = & & 67 + 5 = & & 65 + 7 = & & 76 + 7 = \\
 & 48 + 9 = & & 36 + 9 = & & 74 + 8 = & & 53 + 9 = \\
 & 29 + 7 = & & 87 + 6 = & & 25 + 9 = & & 64 + 8 = \\
 & 68 + 4 = & & 16 + 8 = & & 44 + 7 = & & 48 + 7 = \\
 & 79 + 9 = & & 57 + 5 = & & 75 + 8 = & & 42 + 9 = \\
 & 88 + 7 = & & 76 + 8 = & & 14 + 6 = & & 27 + 8 =
 \end{array}$$

$$\begin{array}{llll}
 \mathbf{12)} & 23 + 4 + 5 = & \mathbf{13)} & 17 + 8 + 7 = & \mathbf{14)} & 36 + 5 + 9 = \\
 & 36 + 7 + 4 = & & 28 + 3 + 5 = & & 42 + 7 + 8 = \\
 & 48 + 9 + 7 = & & 46 + 7 + 9 = & & 83 + 9 + 6 = \\
 & 51 + 3 + 4 = & & 35 + 8 + 7 = & & 55 + 7 + 9 = \\
 & 37 + 9 + 8 = & & 64 + 5 + 9 = & & 76 + 7 + 6 = \\
 & 86 + 2 + 7 = & & 53 + 7 + 4 = & & 24 + 5 + 9 = \\
 & 15 + 4 + 9 = & & 82 + 7 + 5 = & & 74 + 8 + 5 = \\
 & 27 + 3 + 8 = & & 91 + 5 + 4 = & & 31 + 7 + 8 = \\
 & 55 + 8 + 7 = & & 29 + 7 + 6 = & & 64 + 9 + 7 = \\
 & 72 + 4 + 5 = & & 48 + 8 + 8 = & & 85 + 7 + 8 =
 \end{array}$$

IV.*)

$$\begin{array}{l}
 \mathbf{1)} & 5 + 7 + 3 + 8 + 9 + 6 + 4 + 7 + 2 + 4 = \\
 & 7 + 3 + 8 + 6 + 1 + 8 + 9 + 4 + 6 + 5 = \\
 & 4 + 8 + 9 + 3 + 7 + 5 + 6 + 4 + 8 + 6 = \\
 & 6 + 3 + 5 + 8 + 4 + 2 + 7 + 6 + 9 + 5 = \\
 & 9 + 6 + 8 + 4 + 2 + 5 + 3 + 8 + 7 + 9 = \\
 \\
 \mathbf{2)} & 6 + 5 + 8 + 9 + 7 + 1 + 4 + 2 + 3 + 5 = \\
 & 7 + 4 + 9 + 5 + 8 + 3 + 2 + 6 + 8 + 7 = \\
 & 4 + 3 + 6 + 7 + 9 + 1 + 8 + 2 + 4 + 6 = \\
 & 8 + 6 + 3 + 9 + 5 + 4 + 7 + 8 + 3 + 9 = \\
 & 6 + 5 + 7 + 4 + 6 + 3 + 8 + 2 + 5 + 7 =
 \end{array}$$

*) Der Lehrer kann bei Nr. 1—4 auch die senkrechten Reihen jedes Abjages zusammenzählen lassen.

$$\begin{aligned}
 \mathbf{3)} \quad & 4 + 7 + 9 + 3 + 2 + 6 + 8 + 5 + 2 + 9 = \\
 & 5 + 8 + 3 + 4 + 7 + 6 + 5 + 9 + 1 + 3 = \\
 & 8 + 4 + 2 + 7 + 6 + 5 + 9 + 4 + 2 + 6 = \\
 & 6 + 7 + 2 + 5 + 9 + 8 + 3 + 7 + 4 + 6 = \\
 & 4 + 1 + 3 + 6 + 4 + 8 + 5 + 7 + 2 + 9 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{4)} \quad & 9 + 1 + 5 + 3 + 8 + 7 + 2 + 6 + 3 + 8 = \\
 & 6 + 4 + 3 + 5 + 7 + 9 + 8 + 2 + 6 + 4 = \\
 & 5 + 9 + 4 + 3 + 2 + 7 + 4 + 8 + 7 + 1 = \\
 & 7 + 6 + 2 + 1 + 3 + 8 + 6 + 7 + 4 + 9 = \\
 & 5 + 8 + 6 + 3 + 4 + 7 + 9 + 1 + 6 + 5 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{5)} \quad & 26 + 5 + 8 + 3 + 7 = \\
 & 35 + 8 + 9 + 6 + 5 = \\
 & 18 + 7 + 5 + 9 + 8 = \\
 & 47 + 9 + 6 + 3 + 7 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{6)} \quad & 17 + 7 + 4 + 5 + 9 = \\
 & 43 + 4 + 8 + 9 + 6 = \\
 & 52 + 3 + 9 + 8 + 7 = \\
 & 66 + 9 + 4 + 5 + 8 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{7)} \quad & 36 + 6 + 7 + 8 + 9 = \\
 & 44 + 3 + 7 + 4 + 6 = \\
 & 72 + 6 + 7 + 5 + 4 = \\
 & 80 + 7 + 4 + 4 + 5 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{8)} \quad & 48 + 6 + 9 + 4 + 1 = \\
 & 37 + 9 + 4 + 6 + 6 = \\
 & 55 + 8 + 5 + 7 + 5 = \\
 & 26 + 3 + 7 + 8 + 7 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{9)} \quad & 18 + 8 + 6 + 9 + 3 = \\
 & 27 + 7 + 4 + 8 + 9 = \\
 & 35 + 9 + 8 + 6 + 7 = \\
 & 42 + 4 + 8 + 9 + 5 =
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{10)} \quad & 68 + 5 + 9 + 7 + 4 = \\
 & 53 + 8 + 5 + 9 + 7 = \\
 & 46 + 7 + 3 + 6 + 4 = \\
 & 37 + 9 + 7 + 4 + 5 =
 \end{aligned}$$

V.

1) 6	2) 8	3) 5	4) 6	5) 4	6) 7	7) 3	8) 9
3	9	2	7	7	9	7	5
5	6	7	8	9	6	4	7
4	9	4	6	5	3	6	8
7	8	6	4	8	5	8	6
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

9) 2	10) 7	11) 8	12) 5	13) 9	14) 5	15) 9	16) 8
4	6	6	3	8	7	3	5
5	8	8	6	7	6	6	9
7	9	7	7	6	8	8	6
9	5	5	8	5	4	5	7
6	2	5	9	6	3	7	7
8	7	6	5	9	7	3	5
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

17) 23	18) 36	19) 47	20) 55	21) 28	22) 65
4	9	9	7	6	9
7	8	5	8	4	7
8	5	8	3	7	8
<u>3</u>	<u>4</u>	<u>4</u>	<u>9</u>	<u>5</u>	<u>3</u>

VI.*)

1) $2 + 2 = 4$ $4 + 2 = 6$ $6 + 2 = 8$ bis $98 + 2 = 100$	2) $3 + 3 = 6$ $6 + 3 = 9$ $9 + 3 = 12$ bis $96 + 3 = 99$	3) $4 + 4 = 8$ $8 + 4 = 12$ $12 + 4 = 16$ bis $96 + 4 = 100$
4) $5 + 5 = 10$ $10 + 5 = 15$ bis $95 + 5 = 100$	5) $6 + 6 = 12$ $12 + 6 = 18$ bis $90 + 6 = 96$	6) $7 + 7 = 14$ $14 + 7 = 21$ bis $91 + 7 = 98$
7) $8 + 8 = 16$ $16 + 8 = 24$ bis $88 + 8 = 96$	8) $9 + 9 = 18$ $18 + 9 = 27$ bis $90 + 9 = 99$	9) $10 + 10 = 20$ $20 + 10 = 30$ bis $90 + 10 = 100$

VII.

1) $10 + 10 =$ $50 + 10 =$ $30 + 20 =$ $10 + 30 =$ $50 + 40 =$ $20 + 20 =$ $30 + 40 =$ $40 + 60 =$	2) $20 + 70 =$ $30 + 50 =$ $10 + 40 =$ $70 + 10 =$ $50 + 20 =$ $30 + 60 =$ $20 + 60 =$ $30 + 70 =$	3) $40 + 30 + 30 =$ $10 + 50 + 20 =$ $20 + 30 + 40 =$ $60 + 10 + 20 =$ $30 + 20 + 50 =$ $30 + 30 + 30 =$ $50 + 20 + 20 =$ $10 + 30 + 60 =$
4) $20 + 60 + 3 =$ $40 + 30 + 6 =$ $10 + 50 + 7 =$ $30 + 30 + 3 =$ $50 + 20 + 9 =$ $20 + 70 + 5 =$	5) $20 + 20 + 20 + 6 =$ $30 + 30 + 30 + 9 =$ $40 + 20 + 10 + 4 =$ $10 + 40 + 30 + 5 =$ $20 + 30 + 40 + 6 =$ $50 + 10 + 30 + 8 =$	

*) Die hier aufgeführten Reihen sind die wichtigsten dieser Art; der Lehrer lasse aber auch noch andere bilden.

$$\begin{array}{llll}
 \text{6)} & 10 + 15 = & \text{7)} & 30 + 56 = \\
 & 20 + 14 = & & 20 + 73 = \\
 & 20 + 32 = & & 40 + 45 = \\
 & 30 + 36 = & & 10 + 78 = \\
 & 40 + 25 = & & 20 + 51 = \\
 & 60 + 17 = & & 50 + 39 =
 \end{array}
 \quad
 \begin{array}{llll}
 \text{8)} & 14 + 10 = & & 25 + 10 = \\
 & 32 + 20 = & & 16 + 20 = \\
 & 16 + 20 = & & 37 + 30 = \\
 & 21 + 30 = & & 21 + 30 =
 \end{array}
 \quad
 \begin{array}{ll}
 \text{9)} & 26 + 30 = \\
 & 18 + 80 = \\
 & 39 + 50 = \\
 & 47 + 30 = \\
 & 11 + 70 = \\
 & 55 + 30 =
 \end{array}$$

$$\begin{array}{ll}
 \text{10)} & 20 + 37 + 2 = \\
 & 46 + 30 + 6 = \\
 & 30 + 52 + 8 = \\
 & 33 + 20 + 9 = \\
 & 60 + 25 + 8 = \\
 & 18 + 60 + 7 =
 \end{array}
 \quad
 \begin{array}{ll}
 \text{11)} & 40 + 26 + 6 = \\
 & 27 + 60 + 9 = \\
 & 50 + 34 + 7 = \\
 & 11 + 50 + 5 = \\
 & 30 + 45 + 8 = \\
 & 27 + 50 + 9 =
 \end{array}$$

VIII.

$$\begin{array}{llll}
 \text{1)} & 13 + 12 = & \text{2)} & 53 + 16 = \\
 & 16 + 13 = & & 41 + 27 = \\
 & 14 + 12 = & & 64 + 23 = \\
 & 23 + 13 = & & 16 + 52 = \\
 & 32 + 22 = & & 72 + 13 = \\
 & 24 + 24 = & & 45 + 54 = \\
 & 36 + 22 = & & 22 + 66 = \\
 & 55 + 32 = & & 43 + 36 =
 \end{array}
 \quad
 \begin{array}{llll}
 \text{3)} & 36 + 52 = & & 43 + 35 = \\
 & 53 + 35 = & & 72 + 27 = \\
 & 34 + 55 = & & 24 + 65 = \\
 & 24 + 65 = & & 16 + 63 = \\
 & 16 + 63 = & & 74 + 15 =
 \end{array}
 \quad
 \begin{array}{ll}
 \text{4)} & 52 + 36 = \\
 & 71 + 28 = \\
 & 51 + 26 = \\
 & 46 + 32 = \\
 & 53 + 45 = \\
 & 31 + 56 = \\
 & 22 + 37 = \\
 & 36 + 43 =
 \end{array}$$

$$\begin{array}{lll}
 \text{5)} & 34 + 35 = & \text{6)} & 23 + 23 = \\
 & 46 + 43 = & & 44 + 44 = \\
 & 27 + 32 = & & 14 + 23 = \\
 & 45 + 33 = & & 52 + 17 = \\
 & 21 + 28 = & & 46 + 32 = \\
 & 33 + 42 = & & 75 + 24 = \\
 & 52 + 36 = & & 64 + 13 = \\
 & 65 + 24 = & & 12 + 53 =
 \end{array}
 \quad
 \begin{array}{ll}
 \text{7)} & 32 + 22 + 13 = \\
 & 43 + 32 + 11 = \\
 & 27 + 11 + 31 = \\
 & 22 + 33 + 44 = \\
 & 12 + 13 + 14 = \\
 & 36 + 40 + 12 = \\
 & 41 + 32 + 23 = \\
 & 24 + 60 + 14 =
 \end{array}$$

IX.

$$\begin{array}{llll}
 \text{1)} & 26 + 14 = & \text{2)} & 38 + 52 = \\
 & 28 + 12 = & & 15 + 45 = \\
 & 17 + 33 = & & 11 + 59 = \\
 & 16 + 44 = & & 25 + 65 = \\
 & 24 + 26 = & & 24 + 46 = \\
 & 13 + 67 = & & 27 + 23 = \\
 & 51 + 29 = & & 16 + 34 = \\
 & 47 + 23 = & & 13 + 47 =
 \end{array}
 \quad
 \begin{array}{llll}
 \text{3)} & 59 + 31 = & & 31 + 49 = \\
 & 26 + 54 = & & 26 + 54 = \\
 & 32 + 68 = & & 81 + 19 = \\
 & 81 + 19 = & & 83 + 17 = \\
 & 66 + 24 = & & 66 + 24 = \\
 & 21 + 59 = & & 21 + 59 =
 \end{array}
 \quad
 \begin{array}{ll}
 \text{4)} & 18 + 12 = \\
 & 22 + 38 = \\
 & 67 + 13 = \\
 & 14 + 56 = \\
 & 37 + 43 = \\
 & 42 + 58 = \\
 & 76 + 14 = \\
 & 58 + 22 =
 \end{array}$$

$$\begin{array}{llll}
 \mathbf{5)} & 18 + 17 = & \mathbf{6)} & 29 + 16 = & \mathbf{7)} & 34 + 37 = & \mathbf{8)} & 45 + 28 = \\
 & 38 + 17 = & & 37 + 38 = & & 25 + 26 = & & 43 + 29 = \\
 & 37 + 25 = & & 46 + 26 = & & 38 + 24 = & & 39 + 17 = \\
 & 19 + 27 = & & 28 + 38 = & & 27 + 27 = & & 57 + 19 = \\
 & 78 + 15 = & & 34 + 49 = & & 36 + 36 = & & 56 + 18 = \\
 & 49 + 16 = & & 46 + 46 = & & 55 + 28 = & & 48 + 14 = \\
 & 49 + 37 = & & 35 + 47 = & & 27 + 29 = & & 67 + 19 = \\
 & 46 + 35 = & & 26 + 56 = & & 19 + 55 = & & 58 + 18 = \\
 & 33 + 29 = & & 23 + 39 = & & 18 + 66 = & & 39 + 38 =
 \end{array}$$

$$\begin{array}{ll}
 \mathbf{9)} & 12 + 13 + 14 = & \mathbf{10)} & 26 + 37 + (3 \times 3) = \\
 & 15 + 26 + 37 = & & 38 + 46 + (2 \times 4) = \\
 & 18 + 18 + 18 = & & 25 + 36 + (5 \times 2) = \\
 & 24 + 24 + 24 = & & 39 + 55 + (2 \times 3) = \\
 & 27 + 38 + 19 = & & 47 + 47 + (2 \times 2) = \\
 & 39 + 15 + 28 = & & 18 + 19 + (4 \times 2) =
 \end{array}$$

11) Zähle 37 zu a) 18; b) 24; c) 35; d) 41; e) 57; f) 63; g) 17; h) 38; i) 29; k) 47!

12) Welche Zahl ist um 25 größer als a) 18; b) 27; c) 36; d) 44; e) 16; f) 64; g) 55; h) 29; i) 74; k) 38?

X.

$$\begin{array}{llllll}
 \mathbf{1)} & 31 & \mathbf{2)} & 12 & \mathbf{3)} & 11 & \mathbf{4)} & 24 & \mathbf{5)} & 26 & \mathbf{6)} & 53 \\
 & 13 & & 32 & & 42 & & 42 & & 31 & & 21 \\
 & \underline{22} & & \underline{13} & & \underline{34} & & \underline{33} & & \underline{12} & & \underline{12} \\
 \\
 \mathbf{7)} & 34 & \mathbf{8)} & 46 & \mathbf{9)} & 57 & \mathbf{10)} & 22 & \mathbf{11)} & 33 & \mathbf{12)} & 45 \\
 & 22 & & 34 & & 22 & & 27 & & 43 & & 20 \\
 & \underline{14} & & \underline{10} & & \underline{11} & & \underline{21} & & \underline{14} & & \underline{35} \\
 \\
 \mathbf{13)} & 38 & \mathbf{14)} & 46 & \mathbf{15)} & 35 & \mathbf{16)} & 27 & \mathbf{17)} & 45 & \mathbf{18)} & 29 \\
 & 17 & & 25 & & 45 & & 39 & & 31 & & 16 \\
 & \underline{20} & & \underline{13} & & \underline{12} & & \underline{34} & & \underline{19} & & \underline{13} \\
 \\
 \mathbf{19)} & 46 & \mathbf{20)} & 35 & \mathbf{21)} & 6 & \mathbf{22)} & 9 & \mathbf{23)} & 36 & \mathbf{24)} & 29 \\
 & 8 & & 7 & & 17 & & 25 & & 47 & & 46 \\
 & \underline{12} & & \underline{28} & & \underline{38} & & \underline{37} & & \underline{4} & & \underline{5}
 \end{array}$$

Dritte Übung.

Abziehen oder Subtrahiren.

I.

- | | | | |
|----------------------|-----------------------|-----------------------|-----------------------|
| 1) $11 - 1 =$ | 2) $12 - 2 =$ | 3) $13 - 3 =$ | 4) $14 - 5 =$ |
| $11 - 5 =$ | $12 - 4 =$ | $13 - 5 =$ | $14 - 8 =$ |
| $11 - 9 =$ | $12 - 8 =$ | $13 - 7 =$ | $14 - 6 =$ |
| $11 - 4 =$ | $12 - 5 =$ | $13 - 4 =$ | $14 - 9 =$ |
| $11 - 8 =$ | $12 - 7 =$ | $13 - 8 =$ | $14 - 7 =$ |
| $11 - 6 =$ | $12 - 9 =$ | $13 - 6 =$ | $14 - 2 =$ |
| 5) $15 - 7 =$ | 6) $16 - 7 =$ | 7) $17 - 7 =$ | 8) $18 - 9 =$ |
| $15 - 9 =$ | $16 - 9 =$ | $17 - 9 =$ | $18 - 3 =$ |
| $15 - 6 =$ | $16 - 8 =$ | $17 - 2 =$ | $18 - 7 =$ |
| $15 - 8 =$ | $16 - 3 =$ | $17 - 8 =$ | $18 - 4 =$ |
| $15 - 2 =$ | $16 - 5 =$ | $17 - 5 =$ | $18 - 2 =$ |
| $15 - 4 =$ | $16 - 2 =$ | $17 - 4 =$ | $18 - 6 =$ |
| 9) $19 - 9 =$ | 10) $13 - 4 =$ | 11) $18 - 9 =$ | 12) $12 - 9 =$ |
| $19 - 3 =$ | $15 - 9 =$ | $16 - 4 =$ | $14 - 7 =$ |
| $19 - 7 =$ | $11 - 7 =$ | $19 - 7 =$ | $18 - 6 =$ |
| $19 - 5 =$ | $14 - 8 =$ | $12 - 8 =$ | $12 - 7 =$ |
| $19 - 8 =$ | $12 - 5 =$ | $13 - 6 =$ | $15 - 8 =$ |
| $19 - 6 =$ | $16 - 7 =$ | $17 - 5 =$ | $16 - 8 =$ |
| $19 - 4 =$ | $12 - 6 =$ | $14 - 5 =$ | $15 - 6 =$ |
| $19 - 2 =$ | $15 - 7 =$ | $11 - 4 =$ | $13 - 7 =$ |

II.

- 1)** Nimm 2 weg von: 25, 47, 53, 38, 94, 76, 35, 87, 45, 59.
2) Nimm 3 weg von: 16, 37, 28, 44, 83, 59, 66, 25, 74, 99.
3) Nimm 4 weg von: 56, 85, 74, 37, 29, 35, 28, 98, 66, 47.
4) Nimm 5 weg von: 95, 67, 79, 87, 38, 26, 48, 59, 86, 19.
5) Nimm 6 weg von: 87, 58, 99, 48, 26, 57, 39, 66, 89, 18.
- | | | | |
|----------------------|----------------------|----------------------|----------------------|
| 6) $28 - 6 =$ | 7) $47 - 5 =$ | 8) $66 - 4 =$ | 9) $88 - 2 =$ |
| $36 - 4 =$ | $48 - 4 =$ | $37 - 6 =$ | $67 - 5 =$ |
| $49 - 2 =$ | $46 - 6 =$ | $49 - 7 =$ | $27 - 4 =$ |
| $27 - 5 =$ | $69 - 7 =$ | $65 - 4 =$ | $39 - 7 =$ |
| $68 - 3 =$ | $78 - 3 =$ | $79 - 8 =$ | $57 - 3 =$ |
| $35 - 4 =$ | $59 - 8 =$ | $87 - 3 =$ | $69 - 8 =$ |
| $28 - 7 =$ | $58 - 5 =$ | $98 - 6 =$ | $73 - 2 =$ |
| $25 - 2 =$ | $39 - 7 =$ | $99 - 5 =$ | $96 - 5 =$ |

III.

- 1) Von 20 ziehe ab: 1, 5, 8, 3, 9, 4, 6, 7, 2.
 2) Von 40 ziehe ab: 3, 1, 5, 6, 8, 4, 2, 7, 9.
 3) Von 60 ziehe ab: 4, 5, 9, 7, 8, 6, 3, 1, 2.
 4) Von 80 ziehe ab: 5, 6, 8, 3, 1, 9, 2, 7, 4.
 5) Von 100 ziehe ab: 6, 4, 1, 9, 2, 5, 3, 8, 7.

6) 30 — 6 =	7) 30 — 9 =	8) 50 — 1 =
50 — 9 =	50 — 7 =	80 — 7 =
70 — 8 =	40 — 3 =	30 — 5 =
90 — 2 =	80 — 7 =	90 — 9 =
40 — 7 =	20 — 8 =	70 — 6 =
80 — 3 =	100 — 6 =	60 — 8 =

IV.

1) 21 — 2 =	2) 32 — 3 =	3) 24 — 7 =	4) 32 — 6 =
34 — 5 =	13 — 6 =	43 — 6 =	64 — 8 =
52 — 4 =	52 — 5 =	94 — 8 =	51 — 5 =
76 — 8 =	72 — 4 =	35 — 9 =	93 — 7 =
44 — 6 =	95 — 8 =	73 — 6 =	45 — 9 =
62 — 7 =	46 — 9 =	14 — 8 =	16 — 8 =

5) Nimm 6 weg von: 35, 24, 45, 83, 64, 52, 33, 91, 13.

6) Nimm 7 weg von: 26, 34, 65, 43, 51, 76, 92, 83, 22.

7) Nimm 8 weg von: 37, 46, 25, 51, 63, 22, 74, 92, 33.

8) Nimm 9 weg von: 27, 35, 98, 46, 53, 71, 84, 62, 55.

9) 63 — 5 =	10) 44 — 8 =	11) 32 — 9 =	12) 42 — 8 =
21 — 6 =	75 — 8 =	64 — 5 =	61 — 7 =
33 — 7 =	91 — 2 =	52 — 8 =	58 — 9 =
46 — 9 =	96 — 7 =	41 — 7 =	51 — 6 =
21 — 8 =	53 — 8 =	62 — 9 =	73 — 8 =
34 — 9 =	82 — 9 =	83 — 6 =	94 — 9 =

13) 21 = 4 + ?	14) 42 = 6 + ?	15) 36 = 9 + ?
32 = 4 + ?	65 = 8 + ?	52 = 8 + ?
43 = 6 + ?	33 = 5 + ?	81 = 7 + ?
53 = 8 + ?	72 = 7 + ?	63 = 9 + ?
24 = 8 + ?	91 = 5 + ?	41 = 8 + ?
55 = 7 + ?	22 = 9 + ?	44 = 9 + ?

V.*)

- | | | |
|---|--|---|
| 1) $100 - 2 = 98$
$98 - 2 = 96$
bis
$2 - 2 = 0$ | 2) $99 - 3 = 96$
$96 - 3 = 93$
bis
$3 - 3 = 0$ | 3) $100 - 4 = 96$
$96 - 4 = 92$
bis
$4 - 4 = 0$ |
| 4) $100 - 5 = 95$
$95 - 5 = 90$
u. f. w. | 5) $96 - 6 = 90$
$90 - 6 = 84$
u. f. w. | 6) $98 - 7 = 91$
$91 - 7 = 84$
u. f. w. |
| 7) $96 - 8 = 88$
$88 - 8 = 80$
u. f. w. | 8) $99 - 9 = 90$
$90 - 9 = 81$
u. f. w. | 9) $100 - 10 = 90$
$90 - 10 = 80$
u. f. w. |

VI.

- | | | |
|---|--|--|
| 1) $30 - 10 =$
$60 - 20 =$
$50 - 40 =$
$60 - 30 =$
$90 - 20 =$
$40 - 30 =$
$20 - 10 =$
$100 - 60 =$ | 2) $100 - 30 =$
$70 - 50 =$
$80 - 30 =$
$60 - 40 =$
$30 - 10 =$
$50 - 30 =$
$90 - 60 =$
$100 - 10 =$ | 3) $100 - 20 - 10 =$
$70 - 30 - 20 =$
$90 - 40 - 40 =$
$60 - 20 - 30 =$
$80 - 50 - 30 =$
$90 - 30 - 50 =$
$70 - 40 - 10 =$
$100 - 50 - 30 =$ |
|---|--|--|

4) Von 61 ziehe ab: 10, 30, 50, 20, 40, 60.

5) Von 97 ziehe ab: 30, 10, 50, 80, 20, 60, 90, 40.

6) Von 83 ziehe ab: 20, 60, 10, 50, 80, 30, 70, 40.

- | | | | |
|---|---|---|--|
| 7) $25 - 10 =$
$47 - 30 =$
$52 - 20 =$
$69 - 40 =$
$51 - 50 =$ | 8) $79 - 50 =$
$83 - 40 =$
$68 - 30 =$
$55 - 30 =$
$32 - 10 =$ | 9) $87 - 50 =$
$93 - 80 =$
$36 - 20 =$
$75 - 40 =$
$62 - 50 =$ | 10) $97 - 60 =$
$72 - 60 =$
$81 - 30 =$
$64 - 60 =$
$86 - 30 =$ |
|---|---|---|--|

VII.

- | | | | |
|--|--|--|--|
| 1) $34 - 14 =$
$55 - 25 =$
$67 - 37 =$
$28 - 18 =$ | 2) $79 - 39 =$
$81 - 51 =$
$93 - 63 =$
$65 - 45 =$ | 3) $87 - 57 =$
$59 - 29 =$
$72 - 62 =$
$94 - 74 =$ | 4) $46 - 26 =$
$88 - 68 =$
$91 - 51 =$
$83 - 53 =$ |
|--|--|--|--|

*) Die hier aufgeführten Reihen sind die wichtigsten dieser Art; der Lehrer lasse aber auch noch andere bilden.

- 5)** $44 - 22 =$ **6)** $88 - 63 =$ **7)** $39 - 16 =$ **8)** $98 - 36 =$
 $67 - 33 =$ $66 - 23 =$ $78 - 45 =$ $95 - 53 =$
 $58 - 11 =$ $55 - 34 =$ $46 - 32 =$ $78 - 26 =$
 $87 - 44 =$ $99 - 45 =$ $98 - 67 =$ $56 - 35 =$
 $96 - 55 =$ $26 - 13 =$ $56 - 22 =$ $88 - 27 =$
 $77 - 22 =$ $45 - 24 =$ $89 - 54 =$ $93 - 51 =$
 $59 - 33 =$ $68 - 45 =$ $65 - 23 =$ $87 - 46 =$
 $68 - 44 =$ $97 - 56 =$ $78 - 46 =$ $96 - 63 =$
- 9)** $37 = 21 + ?$ **10)** $46 = 23 + ?$ **11)** $64 = 32 + ?$
 $29 = 16 + ?$ $88 = 45 + ?$ $58 = 46 + ?$
 $48 = 24 + ?$ $69 = 36 + ?$ $84 = 42 + ?$
 $56 = 35 + ?$ $77 = 66 + ?$ $99 = 55 + ?$

VIII.

- 1)** Von 70 nimm weg: 13, 33, 53, 44, 24, 66, 36, 56.
2) Von 80 nimm weg: 24, 36, 48, 69, 51, 73, 15, 64.
3) Von 90 nimm weg: 37, 59, 43, 65, 18, 72, 41, 88.
4) Von 100 nimm weg: 88, 83, 65, 54, 75, 25, 39, 93.
- 5)** $60 - 23 =$ **6)** $80 - 35 =$ **7)** $60 - 42 =$ **8)** $30 - 14 =$
 $90 - 64 =$ $30 - 16 =$ $50 - 39 =$ $50 - 26 =$
 $50 - 27 =$ $70 - 41 =$ $80 - 46 =$ $60 - 19 =$
 $40 - 18 =$ $100 - 36 =$ $100 - 57 =$ $100 - 24 =$

IX.

- 1)** Von 61 nimm weg: 22, 42, 33, 53, 14, 44, 18, 15.
2) Von 72 nimm weg: 33, 24, 55, 16, 47, 68, 14, 25.
3) Von 83 nimm weg: 14, 66, 35, 27, 46, 58, 65, 29.
4) Von 94 nimm weg: 35, 47, 29, 56, 68, 85, 17, 79.
- 5)** $31 - 13 =$ **6)** $62 - 26 =$ **7)** $51 - 26 =$
 $42 - 24 =$ $43 - 34 =$ $73 - 48 =$
 $53 - 35 =$ $71 - 17 =$ $87 - 59 =$
 $74 - 46 =$ $52 - 25 =$ $52 - 38 =$
 $65 - 57 =$ $93 - 36 =$ $91 - 39 =$
 $96 - 68 =$ $84 - 48 =$ $65 - 48 =$
- 8)** $73 - 35 =$ **9)** $51 - 19 =$ **10)** $92 - 48 =$ **11)** $47 - 18 =$
 $68 - 29 =$ $73 - 35 =$ $52 - 23 =$ $71 - 36 =$
 $48 - 19 =$ $45 - 27 =$ $73 - 26 =$ $32 - 15 =$
 $85 - 37 =$ $27 - 19 =$ $81 - 35 =$ $65 - 48 =$
 $61 - 19 =$ $91 - 18 =$ $93 - 27 =$ $68 - 29 =$
 $31 - 17 =$ $86 - 58 =$ $72 - 36 =$ $91 - 56 =$

12) $83 - 17 =$	13) $73 - 54 =$	14) $36 - 27 =$
$76 - 18 =$	$38 - 19 =$	$41 - 37 =$
$85 - 49 =$	$67 - 29 =$	$64 - 29 =$
$72 - 39 =$	$64 - 48 =$	$55 - 19 =$
$73 - 64 =$	$92 - 79 =$	$85 - 79 =$
$51 - 17 =$	$45 - 19 =$	$71 - 66 =$

X. *)

1) $83 = 60 + ?$	2) $52 = 22 + ?$	3) $56 = 24 + ?$
$47 = 10 + ?$	$76 = 36 + ?$	$38 = 17 + ?$
$59 = 30 + ?$	$84 = 24 + ?$	$89 = 32 + ?$
$91 = 50 + ?$	$35 = 15 + ?$	$47 = 33 + ?$
$74 = 20 + ?$	$91 = 31 + ?$	$78 = 25 + ?$
$62 = 10 + ?$	$63 = 43 + ?$	$85 = 61 + ?$
4) $50 = 25 + ?$	5) $32 = 16 + ?$	6) $34 = 16 + ?$
$70 = 28 + ?$	$44 = 28 + ?$	$78 = 38 + ?$
$60 = 32 + ?$	$56 = 39 + ?$	$57 = 26 + ?$
$90 = 45 + ?$	$61 = 45 + ?$	$84 = 59 + ?$
$40 = 17 + ?$	$73 = 48 + ?$	$70 = 46 + ?$
$100 = 69 + ?$	$92 = 29 + ?$	$62 = 28 + ?$

7) $42 = 40 + ?$	8) $51 = 48 + ?$	9) $62 = 59 + ?$
$65 = 62 + ?$	$32 = 29 + ?$	$58 = 55 + ?$
$79 = 76 + ?$	$85 = 82 + ?$	$83 = 79 + ?$
$22 = 19 + ?$	$71 = 68 + ?$	$31 = 28 + ?$
$38 = 34 + ?$	$43 = 39 + ?$	$82 = 78 + ?$
$41 = 39 + ?$	$91 = 89 + ?$	$33 = 29 + ?$

XI.

1) $12 + 27 - 5 =$	2) $27 + 30 - 8 =$	3) $16 + 14 - 4 =$
$33 + 54 - 6 =$	$35 + 20 - 7 =$	$23 + 37 - 8 =$
$41 + 26 - 4 =$	$40 + 31 - 5 =$	$15 + 25 - 9 =$
$53 + 36 - 7 =$	$60 + 12 - 6 =$	$31 + 49 - 6 =$
$22 + 47 - 8 =$	$53 + 20 - 9 =$	$28 + 32 - 7 =$

*) Bei den Aufgaben unter Nr. 7—9 findet man das Resultat am bequemsten durch Hinaufzählen von der kleineren zur größeren Zahl.

$$\begin{array}{lll}
 \mathbf{4)} & 25 + 40 - 30 = & \mathbf{5)} & 70 - 30 + 60 = & \mathbf{6)} & 78 + 18 - 43 = \\
 & 37 + 30 - 8 = & & 32 - 23 + 40 = & & 59 + 32 - 54 = \\
 & 48 + 10 - 12 = & & 54 - 36 + 9 = & & 55 + 26 - 63 = \\
 & 24 + 26 - 25 = & & 45 - 10 + 37 = & & 44 + 18 - 44 = \\
 & 34 + 34 - 35 = & & 72 - 36 + 36 = & & 60 + 32 - 29 = \\
 & 45 + 25 - 26 = & & 98 - 45 + 18 = & & 9 + 48 - 30 = \\
 & 56 + 16 - 18 = & & 60 - 33 + 25 = & & 17 + 34 - 26 = \\
 & 67 + 21 - 32 = & & 100 - 75 + 25 = & & 25 + 19 - 27 = \\
 & 32 + 48 - 16 = & & 55 - 18 + 36 = & & 47 + 36 - 52 =
 \end{array}$$

XII.

$$\begin{array}{llllll}
 \mathbf{1)} & 48 & \mathbf{2)} & 60 & \mathbf{3)} & 59 & \mathbf{4)} & 40 & \mathbf{5)} & 31 & \mathbf{6)} & 52 \\
 & \underline{-6} & & \underline{-8} & & \underline{-7} & & \underline{-5} & & \underline{-6} & & \underline{-7} \\
 \\
 \mathbf{7)} & 50 & \mathbf{8)} & 46 & \mathbf{9)} & 73 & \mathbf{10)} & 88 & \mathbf{11)} & 97 & \mathbf{12)} & 83 \\
 & \underline{20} & & \underline{30} & & \underline{43} & & \underline{53} & & \underline{64} & & \underline{60} \\
 \\
 \mathbf{13)} & 93 & \mathbf{14)} & 72 & \mathbf{15)} & 38 & \mathbf{16)} & 70 & \mathbf{17)} & 94 & \mathbf{18)} & 62 \\
 & \underline{16} & & \underline{59} & & \underline{29} & & \underline{43} & & \underline{64} & & \underline{38} \\
 \\
 \mathbf{19)} & 33 & \mathbf{20)} & 47 & \mathbf{21)} & 50 & \mathbf{22)} & 83 & \mathbf{23)} & 59 & \mathbf{24)} & 100 \\
 & \underline{17} & & \underline{9} & & \underline{27} & & \underline{36} & & \underline{32} & & \underline{49} \\
 \\
 \mathbf{25)} & 68 & \mathbf{26)} & 67 & \mathbf{27)} & 23 & \mathbf{28)} & 70 & \mathbf{29)} & 74 & \mathbf{30)} & 51 \\
 & \underline{49} & & \underline{15} & & \underline{8} & & \underline{25} & & \underline{50} & & \underline{37}
 \end{array}$$

Vierte Übung.

Bervielfältigen oder Multipliciren.

I.

$$\begin{array}{llll}
 \mathbf{1)} & 1 \times 2 = & \mathbf{2)} & 9 \times 2 = & \mathbf{3)} & 1 \times 3 = & \mathbf{4)} & 10 \times 3 = \\
 & 5 \times 2 = & & 4 \times 2 = & & 3 \times 3 = & & 8 \times 3 = \\
 & 3 \times 2 = & & 8 \times 2 = & & 5 \times 3 = & & 4 \times 3 = \\
 & 7 \times 2 = & & 6 \times 2 = & & 2 \times 3 = & & 9 \times 3 = \\
 & 2 \times 2 = & & 10 \times 2 = & & 6 \times 3 = & & 7 \times 3 = \\
 \\
 \mathbf{5)} & 4 = 2 \times & \mathbf{6)} & 8 = 4 \times & \mathbf{7)} & 24 = 8 \times & \mathbf{8)} & 21 = 7 \times \\
 & 6 = 3 \times & & 3 = 1 \times & & 16 = 8 \times & & 12 = 4 \times \\
 & 9 = 3 \times & & 14 = 7 \times & & 30 = 10 \times & & 12 = 6 \times \\
 & 15 = 5 \times & & 2 = 1 \times & & 10 = 5 \times & & 27 = 9 \times \\
 & 20 = 10 \times & & 6 = 2 \times & & 18 = 6 \times & & 18 = 9 \times
 \end{array}$$

II.

1) $1 \times 4 =$	2) $5 \times 3 =$	3) $9 \times 2 =$	4) $12 = 3 \times$
$3 \times 4 =$	$4 \times 2 =$	$4 \times 4 =$	$30 = 10 \times$
$5 \times 4 =$	$5 \times 4 =$	$3 \times 2 =$	$10 = 5 \times$
$2 \times 4 =$	$7 \times 3 =$	$6 \times 3 =$	$9 = 3 \times$
$7 \times 4 =$	$10 \times 4 =$	$8 \times 4 =$	$8 = 2 \times$
$9 \times 4 =$	$9 \times 3 =$	$2 \times 2 =$	$27 = 9 \times$
$6 \times 4 =$	$7 \times 2 =$	$6 \times 4 =$	$20 = 5 \times$
$8 \times 4 =$	$8 \times 3 =$	$4 \times 3 =$	$18 = 9 \times$
$4 \times 4 =$	$7 \times 4 =$	$8 \times 2 =$	$18 = 6 \times$
$10 \times 4 =$	$6 \times 2 =$	$9 \times 4 =$	$21 = 7 \times$

5) $1 \times 5 =$	6) $8 \times 3 =$	7) $8 \times 5 =$	8) $24 = 8 \times$
$3 \times 5 =$	$7 \times 5 =$	$9 \times 4 =$	$28 = 7 \times$
$8 \times 5 =$	$5 \times 4 =$	$4 \times 3 =$	$30 = 6 \times$
$6 \times 5 =$	$7 \times 4 =$	$3 \times 4 =$	$32 = 8 \times$
$5 \times 5 =$	$9 \times 2 =$	$5 \times 5 =$	$12 = 4 \times$
$7 \times 5 =$	$5 \times 3 =$	$8 \times 4 =$	$15 = 3 \times$
$2 \times 5 =$	$9 \times 5 =$	$7 \times 2 =$	$45 = 9 \times$
$9 \times 5 =$	$2 \times 3 =$	$4 \times 5 =$	$36 = 9 \times$
$4 \times 5 =$	$6 \times 5 =$	$6 \times 4 =$	$25 = 5 \times$
$10 \times 5 =$	$4 \times 4 =$	$3 \times 5 =$	$40 = 10 \times$

- 9)** Schreibe die Zweierzahlen bis 20 auf; vor- und rückwärts.
10) Schreibe die Dreierzahlen bis 30 auf; vor- und rückwärts.
11) Schreibe die Viererzahlen bis 40 auf; vor- und rückwärts.
12) Schreibe die Fünferzahlen bis 50 auf; vor- und rückwärts.

III.

1) $1 \times 6 =$	2) $9 \times 3 =$	3) $6 \times 6 =$	4) $18 = 3 \times$
$4 \times 6 =$	$6 \times 2 =$	$3 \times 5 =$	$10 = 2 \times$
$2 \times 6 =$	$10 \times 5 =$	$2 \times 4 =$	$12 = 6 \times$
$7 \times 6 =$	$7 \times 3 =$	$7 \times 3 =$	$12 = 3 \times$
$3 \times 6 =$	$8 \times 6 =$	$9 \times 4 =$	$30 = 5 \times$
$8 \times 6 =$	$4 \times 5 =$	$8 \times 5 =$	$40 = 8 \times$
$6 \times 6 =$	$6 \times 4 =$	$4 \times 6 =$	$16 = 4 \times$
$9 \times 6 =$	$9 \times 6 =$	$6 \times 3 =$	$42 = 7 \times$
$5 \times 6 =$	$7 \times 2 =$	$7 \times 5 =$	$24 = 6 \times$
$10 \times 6 =$	$5 \times 3 =$	$10 \times 2 =$	$24 = 8 \times$

5) $1 \times 7 =$	6) $2 \times 6 =$	7) $5 \times 6 =$	8) $2 \times 7 =$
$4 \times 7 =$	$5 \times 5 =$	$5 \times 7 =$	$3 \times 6 =$
$2 \times 7 =$	$4 \times 7 =$	$2 \times 3 =$	$7 \times 6 =$
$5 \times 7 =$	$7 \times 6 =$	$6 \times 5 =$	$6 \times 7 =$
$3 \times 7 =$	$9 \times 5 =$	$8 \times 6 =$	$10 \times 6 =$
$6 \times 7 =$	$4 \times 2 =$	$2 \times 5 =$	$5 \times 2 =$
$9 \times 7 =$	$3 \times 7 =$	$9 \times 7 =$	$4 \times 5 =$
$8 \times 7 =$	$6 \times 6 =$	$4 \times 6 =$	$7 \times 7 =$
$10 \times 7 =$	$8 \times 2 =$	$9 \times 5 =$	$5 \times 6 =$
$7 \times 7 =$	$8 \times 7 =$	$3 \times 3 =$	$4 \times 2 =$

9) $10 \times 3 =$	10) $9 \times 6 =$	11) $35 = 5 \times$	12) $21 = 3 \times$
$2 \times 6 =$	$3 \times 3 =$	$36 = 6 \times$	$12 = 2 \times$
$6 \times 7 =$	$6 \times 5 =$	$20 = 4 \times$	$16 = 8 \times$
$7 \times 5 =$	$3 \times 2 =$	$15 = 5 \times$	$56 = 8 \times$
$3 \times 4 =$	$4 \times 6 =$	$49 = 7 \times$	$24 = 4 \times$
$8 \times 7 =$	$9 \times 7 =$	$48 = 8 \times$	$54 = 9 \times$
$9 \times 3 =$	$6 \times 6 =$	$14 = 2 \times$	$14 = 7 \times$
$3 \times 6 =$	$5 \times 4 =$	$8 = 4 \times$	$28 = 4 \times$
$2 \times 4 =$	$3 \times 5 =$	$35 = 7 \times$	$63 = 9 \times$
$3 \times 7 =$	$4 \times 7 =$	$60 = 10 \times$	$6 = 3 \times$

13) Schreibe die Sechszahlen bis 60 auf; vor- und rückwärts.

14) Schreibe die Siebenezahlen bis 70 auf; vor- und rückwärts.

IV.

1) $1 \times 8 =$	2) $5 \times 7 =$	3) $4 \times 8 =$	4) $56 = 7 \times$
$5 \times 8 =$	$8 \times 3 =$	$4 \times 7 =$	$24 = 3 \times$
$3 \times 8 =$	$5 \times 2 =$	$8 \times 8 =$	$24 = 8 \times$
$8 \times 8 =$	$7 \times 7 =$	$4 \times 3 =$	$18 = 6 \times$
$2 \times 8 =$	$8 \times 5 =$	$8 \times 4 =$	$16 = 2 \times$
$7 \times 8 =$	$7 \times 4 =$	$9 \times 8 =$	$48 = 8 \times$
$9 \times 8 =$	$3 \times 7 =$	$3 \times 6 =$	$25 = 5 \times$
$6 \times 8 =$	$4 \times 4 =$	$5 \times 8 =$	$24 = 6 \times$
$4 \times 8 =$	$5 \times 6 =$	$3 \times 4 =$	$40 = 5 \times$
$10 \times 8 =$	$6 \times 8 =$	$7 \times 8 =$	$36 = 6 \times$

5) $1 \times 9 =$	6) $3 \times 8 =$	7) $5 \times 5 =$	8) $32 = 4 \times$
$3 \times 9 =$	$9 \times 8 =$	$2 \times 8 =$	$81 = 9 \times$
$5 \times 9 =$	$2 \times 7 =$	$8 \times 9 =$	$14 = 7 \times$
$7 \times 9 =$	$9 \times 5 =$	$2 \times 6 =$	$42 = 6 \times$
$9 \times 9 =$	$3 \times 9 =$	$5 \times 9 =$	$36 = 4 \times$
$2 \times 9 =$	$6 \times 8 =$	$8 \times 8 =$	$80 = 10 \times$
$4 \times 9 =$	$5 \times 7 =$	$7 \times 6 =$	$20 = 5 \times$
$6 \times 9 =$	$4 \times 9 =$	$3 \times 7 =$	$27 = 3 \times$
$8 \times 9 =$	$7 \times 8 =$	$7 \times 9 =$	$42 = 7 \times$
$10 \times 9 =$	$6 \times 9 =$	$6 \times 3 =$	$18 = 2 \times$

9) Schreibe die Achterzahlen bis 80 auf; vor- und rückwärts.

10) Schreibe die Neunerzahlen bis 90 auf; vor- und rückwärts.

V.

1) $1 \times 10 =$	2) $5 \times 9 =$	3) $8 \times 10 =$	4) $4 \times 8 =$
$4 \times 10 =$	$7 \times 7 =$	$7 \times 8 =$	$3 \times 9 =$
$3 \times 10 =$	$3 \times 8 =$	$9 \times 7 =$	$8 \times 7 =$
$6 \times 10 =$	$9 \times 9 =$	$2 \times 8 =$	$7 \times 9 =$
$5 \times 10 =$	$8 \times 6 =$	$5 \times 10 =$	$6 \times 7 =$
$8 \times 10 =$	$8 \times 9 =$	$8 \times 4 =$	$3 \times 10 =$
$2 \times 10 =$	$3 \times 3 =$	$3 \times 9 =$	$2 \times 8 =$
$9 \times 10 =$	$2 \times 5 =$	$4 \times 8 =$	$8 \times 8 =$
$7 \times 10 =$	$5 \times 8 =$	$4 \times 3 =$	$6 \times 7 =$
$10 \times 10 =$	$6 \times 9 =$	$3 \times 5 =$	$8 \times 5 =$

5) $9 \times 9 =$	6) $10 \times 10 =$	7) $4 \times 9 =$	8) $4 \times 4 =$
$5 \times 8 =$	$6 \times 9 =$	$6 \times 8 =$	$5 \times 5 =$
$4 \times 7 =$	$7 \times 8 =$	$5 \times 9 =$	$8 \times 6 =$
$3 \times 6 =$	$5 \times 7 =$	$7 \times 5 =$	$2 \times 9 =$
$6 \times 5 =$	$7 \times 6 =$	$4 \times 6 =$	$9 \times 8 =$
$7 \times 9 =$	$8 \times 8 =$	$3 \times 8 =$	$8 \times 7 =$
$4 \times 8 =$	$3 \times 9 =$	$8 \times 9 =$	$9 \times 6 =$
$2 \times 7 =$	$7 \times 4 =$	$5 \times 8 =$	$9 \times 9 =$
$8 \times 7 =$	$2 \times 9 =$	$9 \times 7 =$	$7 \times 9 =$
$9 \times 8 =$	$6 \times 10 =$	$10 \times 4 =$	$6 \times 7 =$

VI.

1) Nimm 2 mal: 3, 6, 9, 2, 4, 8, 1, 5, 10, 7.

2) Nimm 4 mal: 2, 4, 8, 10, 3, 5, 7, 9, 6, 1.

3) Nimm 6 mal: 1, 3, 2, 4, 5, 7, 6, 9, 10, 8.

4) Nimm 3 mal: 3, 7, 2, 6, 1, 10, 4, 8, 5, 9.

5) Nimm 5 mal: 10, 5, 1, 8, 4, 2, 9, 6, 3, 7.

6) Nimm 7 mal: 2, 4, 1, 3, 5, 10, 6, 9, 8, 7.

7) Nimm 9 mal: 1, 3, 2, 4, 5, 7, 6, 9, 10, 8.

8) Nimm 8 mal: 3, 6, 9, 2, 4, 8, 1, 5, 10, 7.

9) $6 = 2 \times$	10) $30 = 6 \times$	11) $80 = 8 \times$	12) $36 = 4 \times$
$72 = 8 \times$	$12 = 3 \times$	$27 = 3 \times$	$28 = 4 \times$
$56 = 7 \times$	$54 = 6 \times$	$40 = 5 \times$	$16 = 4 \times$
$35 = 5 \times$	$45 = 9 \times$	$36 = 6 \times$	$40 = 8 \times$
$18 = 3 \times$	$45 = 5 \times$	$81 = 9 \times$	$54 = 6 \times$
$25 = 5 \times$	$28 = 7 \times$	$42 = 6 \times$	$64 = 8 \times$
$63 = 7 \times$	$48 = 6 \times$	$72 = 8 \times$	$35 = 7 \times$
$64 = 8 \times$	$21 = 3 \times$	$32 = 4 \times$	$72 = 9 \times$
$54 = 9 \times$	$63 = 9 \times$	$56 = 8 \times$	$49 = 7 \times$

VII. *)

1) $6 \times 6 + 9 =$	2) $3 \times 8 + 8 =$	3) $9 \times 6 + 9 =$
$7 \times 5 - 8 =$	$8 \times 9 - 6 =$	$7 \times 7 - 7 =$
$10 \times 2 + 6 =$	$8 \times 7 + 8 =$	$8 \times 6 + 4 =$
$5 \times 8 - 7 =$	$5 \times 6 - 9 =$	$9 \times 9 - 6 =$
$4 \times 6 + 8 =$	$3 \times 9 + 7 =$	$3 \times 7 + 9 =$
$7 \times 9 - 9 =$	$10 \times 6 - 4 =$	$7 \times 6 - 8 =$
$8 \times 4 + 8 =$	$6 \times 8 + 7 =$	$4 \times 9 + 8 =$
$9 \times 8 - 5 =$	$6 \times 4 - 8 =$	$7 \times 8 - 9 =$

4) $27 + 23 =$	5) $36 + 47 =$	6) $5 \times 5 + 25 =$
$50 - 26 =$	$66 - 55 =$	$9 \times 7 - 20 =$
$38 + 19 =$	$23 + 77 =$	$5 \times 9 + 46 =$
$69 - 47 =$	$60 - 16 =$	$8 \times 5 - 14 =$
$16 + 26 =$	$19 + 39 =$	$4 \times 8 + 26 =$
$31 - 18 =$	$38 - 18 =$	$6 \times 9 - 44 =$
$45 + 33 =$	$24 + 66 =$	$8 \times 8 + 16 =$
$82 - 44 =$	$93 - 39 =$	$4 \times 7 - 26 =$

VIII.

1) $1 \times 20 =$	2) $4 \times 20 =$	3) $2 \times 50 =$	4) $20 \times 2 =$
$3 \times 20 =$	$3 \times 30 =$	$2 \times 20 =$	$30 \times 3 =$
$2 \times 30 =$	$1 \times 50 =$	$2 \times 40 =$	$20 \times 4 =$
$5 \times 20 =$	$6 \times 10 =$	$9 \times 10 =$	$50 \times 2 =$

*) Bei den Aufgaben Nr. 1, 2, 3 und 6 muß man zuerst multipliciren und alsdann, je nach Vorschrift, addiren oder subtrahiren.

5) $2 \times 11 =$	6) $4 \times 12 =$	7) $2 \times 15 =$	8) $6 \times 12 =$
$3 \times 12 =$	$2 \times 42 =$	$5 \times 12 =$	$3 \times 16 =$
$2 \times 22 =$	$3 \times 33 =$	$4 \times 15 =$	$5 \times 13 =$
$5 \times 11 =$	$2 \times 21 =$	$5 \times 16 =$	$8 \times 12 =$
$3 \times 22 =$	$2 \times 24 =$	$2 \times 35 =$	$3 \times 18 =$
$3 \times 13 =$	$3 \times 31 =$	$5 \times 18 =$	$3 \times 14 =$
$2 \times 32 =$	$2 \times 44 =$	$4 \times 25 =$	$5 \times 15 =$

9) $3 \times 24 =$	10) $5 \times 18 =$	11) $3 \times 13 =$	12) $5 \times 17 =$
$6 \times 16 =$	$7 \times 12 =$	$4 \times 14 =$	$3 \times 23 =$
$2 \times 28 =$	$4 \times 16 =$	$5 \times 19 =$	$4 \times 18 =$
$4 \times 17 =$	$2 \times 29 =$	$2 \times 48 =$	$2 \times 36 =$
$6 \times 13 =$	$6 \times 14 =$	$3 \times 15 =$	$7 \times 13 =$
$2 \times 45 =$	$2 \times 38 =$	$3 \times 27 =$	$6 \times 15 =$
$5 \times 14 =$	$2 \times 27 =$	$6 \times 14 =$	$4 \times 19 =$

IX.

1) $2 \times 2 \times 2 =$	2) $5 \times 5 \times 2 =$	3) $4 \times 4 \times 5 =$
$2 \times 3 \times 3 =$	$6 \times 6 \times 2 =$	$9 \times 3 \times 2 =$
$2 \times 4 \times 3 =$	$3 \times 6 \times 3 =$	$5 \times 7 \times 2 =$
$2 \times 5 \times 4 =$	$2 \times 9 \times 4 =$	$6 \times 3 \times 4 =$
$3 \times 4 \times 5 =$	$7 \times 3 \times 3 =$	$4 \times 6 \times 3 =$
$3 \times 5 \times 4 =$	$3 \times 8 \times 4 =$	$8 \times 3 \times 4 =$
$3 \times 6 \times 2 =$	$4 \times 5 \times 3 =$	$5 \times 5 \times 4 =$

X.

1) $5 \times 9 + 16 =$	2) $6 \times 7 = 40 + ?$	3) $4 \times 8 = 40 - ?$
$4 \times 7 - 16 =$	$3 \times 9 = 22 + ?$	$8 \times 9 = 80 - ?$
$3 \times 8 + 27 =$	$5 \times 8 = 25 + ?$	$9 \times 7 = 66 - ?$
$7 \times 6 - 24 =$	$6 \times 6 = 29 + ?$	$5 \times 6 = 36 - ?$
$8 \times 4 + 35 =$	$7 \times 9 = 58 + ?$	$9 \times 9 = 90 - ?$
$7 \times 5 - 18 =$	$9 \times 5 = 39 + ?$	$6 \times 8 = 52 - ?$
$9 \times 4 + 36 =$	$8 \times 6 = 43 + ?$	$9 \times 6 = 59 - ?$
$8 \times 7 - 36 =$	$6 \times 9 = 49 + ?$	$8 \times 8 = 70 - ?$

Fünfte Übung.

Enthaltensein und Theilen oder Dividiren.

I.

- 1)** 1 in 3 = 3*) **2)** 2 in 14 = **3)** 3 in 9 = **4)** 3 in 6 =
 1 in 8 = 3 in 12 = 4 in 8 = 4 in 28 =
 2 in 4 = 2 in 8 = 3 in 15 = 2 in 16 =
 2 in 10 = 3 in 18 = 4 in 16 = 4 in 12 =
 1 in 7 = 2 in 20 = 3 in 24 = 3 in 12 =
 2 in 12 = 3 in 27 = 4 in 24 = 2 in 12 =
 2 in 18 = 2 in 16 = 3 in 21 = 4 in 36 =
 2 in 6 = 3 in 30 = 4 in 36 = 4 in 32 =
- 5)** 4 in 20 = **6)** 5 in 20 = **7)** 2 in 14 = **8)** 6 in 18 =
 2 in 20 = 5 in 10 = 4 in 40 = 6 in 30 =
 3 in 18 = 5 in 35 = 5 in 30 = 6 in 12 =
 2 in 18 = 5 in 5 = 3 in 15 = 6 in 48 =
 4 in 40 = 5 in 15 = 5 in 50 = 6 in 60 =
 4 in 28 = 5 in 40 = 4 in 32 = 6 in 24 =
 3 in 27 = 5 in 25 = 3 in 24 = 6 in 42 =
 4 in 24 = 5 in 45 = 4 in 20 = 6 in 54 =
 3 in 24 = 5 in 30 = 3 in 21 = 6 in 36 =
- 9)** 5 in 30 = **10)** 7 in 21 = **11)** 6 in 30 = **12)** 4 in 12 =
 6 in 36 = 7 in 42 = 5 in 30 = 6 in 36 =
 4 in 16 = 7 in 14 = 7 in 56 = 3 in 24 =
 5 in 25 = 7 in 70 = 5 in 45 = 2 in 14 =
 4 in 36 = 7 in 28 = 6 in 42 = 6 in 24 =
 3 in 9 = 7 in 49 = 7 in 63 = 5 in 15 =
 5 in 45 = 7 in 35 = 6 in 48 = 7 in 28 =
 5 in 10 = 7 in 63 = 4 in 28 = 5 in 40 =
 2 in 18 = 7 in 56 = 3 in 27 = 7 in 35 =
- 13)** 8 in 16 = **14)** 7 in 63 = **15)** 9 in 27 = **16)** 8 in 56 =
 8 in 40 = 6 in 54 = 9 in 9 = 7 in 35 =
 8 in 56 = 7 in 42 = 9 in 45 = 6 in 18 =
 8 in 24 = 4 in 24 = 9 in 63 = 5 in 40 =
 8 in 48 = 5 in 20 = 9 in 18 = 4 in 32 =
 8 in 72 = 7 in 28 = 9 in 81 = 3 in 27 =
 8 in 32 = 4 in 28 = 9 in 54 = 8 in 72 =
 8 in 64 = 7 in 49 = 9 in 36 = 9 in 90 =
 8 in 80 = 6 in 48 = 9 in 72 = 8 in 48 =

*) Wird gesprochen: 1 steckt in 3 dreimal; oder: 1 ist in 3 dreimal enthalten. — Ueber Reihenbildung siehe Wegweiser!

- 17) 10 in 50 = 18) 9 in 63 = 19) 9 in 27 = 20) 9 in 36 =
 10 in 20 = 7 in 21 = 8 in 32 = 8 in 40 =
 10 in 80 = 8 in 64 = 7 in 42 = 7 in 63 =
 10 in 10 = 6 in 54 = 6 in 36 = 6 in 12 =
 10 in 60 = 9 in 45 = 9 in 54 = 5 in 45 =
 10 in 30 = 8 in 40 = 8 in 24 = 3 in 24 =
 10 in 90 = 7 in 56 = 9 in 18 = 4 in 24 =
 10 in 70 = 7 in 14 = 7 in 28 = 6 in 24 =
 10 in 40 = 9 in 81 = 9 in 27 = 8 in 24 =
 10 in 100 = 5 in 25 = 4 in 20 = 9 in 36 =

II.

- 1) $\frac{1}{2}$ v. 8 = 4*) 2) $\frac{1}{4}$ v. 12 = 3) $\frac{1}{5}$ v. 10 = 4) $\frac{1}{4}$ v. 32 =
 $\frac{1}{2}$ v. 12 = $\frac{1}{4}$ v. 28 = $\frac{1}{3}$ v. 30 = $\frac{1}{2}$ v. 40 =
 $\frac{1}{3}$ v. 15 = $\frac{1}{3}$ v. 18 = $\frac{1}{5}$ v. 30 = $\frac{1}{3}$ v. 12 =
 $\frac{1}{3}$ v. 24 = $\frac{1}{2}$ v. 14 = $\frac{1}{4}$ v. 16 = $\frac{1}{5}$ v. 25 =
 $\frac{1}{2}$ v. 20 = $\frac{1}{4}$ v. 24 = $\frac{1}{5}$ v. 15 = $\frac{1}{4}$ v. 36 =
 $\frac{1}{4}$ v. 20 = $\frac{1}{3}$ v. 27 = $\frac{1}{5}$ v. 21 = $\frac{1}{5}$ v. 35 =
- 5) $\frac{1}{2}$ v. 18 = 6) $\frac{1}{3}$ v. 9 = 7) $\frac{1}{5}$ v. 50 = 8) $\frac{1}{7}$ v. 21 =
 $\frac{1}{6}$ v. 18 = $\frac{1}{4}$ v. 40 = $\frac{1}{6}$ v. 12 = $\frac{1}{3}$ v. 21 =
 $\frac{1}{5}$ v. 20 = $\frac{1}{5}$ v. 40 = $\frac{1}{6}$ v. 36 = $\frac{1}{6}$ v. 36 =
 $\frac{1}{2}$ v. 16 = $\frac{1}{6}$ v. 42 = $\frac{1}{7}$ v. 14 = $\frac{1}{7}$ v. 49 =
 $\frac{1}{2}$ v. 30 = $\frac{1}{4}$ v. 8 = $\frac{1}{4}$ v. 36 = $\frac{1}{6}$ v. 54 =
 $\frac{1}{5}$ v. 45 = $\frac{1}{6}$ v. 24 = $\frac{1}{7}$ v. 35 = $\frac{1}{6}$ v. 28 =
- 9) $\frac{1}{7}$ v. 42 = 10) $\frac{1}{2}$ v. 63 = 11) $\frac{1}{9}$ v. 27 = 12) $\frac{1}{9}$ v. 45 =
 $\frac{1}{6}$ v. 48 = $\frac{1}{2}$ v. 10 = $\frac{1}{8}$ v. 64 = $\frac{1}{10}$ v. 60 =
 $\frac{1}{8}$ v. 48 = $\frac{1}{8}$ v. 32 = $\frac{1}{9}$ v. 63 = $\frac{1}{9}$ v. 72 =
 $\frac{1}{8}$ v. 16 = $\frac{1}{6}$ v. 60 = $\frac{1}{8}$ v. 72 = $\frac{1}{7}$ v. 49 =
 $\frac{1}{4}$ v. 16 = $\frac{1}{7}$ v. 56 = $\frac{1}{9}$ v. 36 = $\frac{1}{8}$ v. 16 =
 $\frac{1}{8}$ v. 40 = $\frac{1}{8}$ v. 56 = $\frac{1}{8}$ v. 24 = $\frac{1}{10}$ v. 100 =

III.

- 1) 3 = $\frac{1}{2}$ v. 2) 6 = $\frac{1}{9}$ v. 3) 3 = $\frac{1}{8}$ v. 4) 5 = $\frac{1}{9}$ v.
 5 = $\frac{1}{4}$ v. 8 = $\frac{1}{7}$ v. 2 = $\frac{1}{9}$ v. 8 = $\frac{1}{3}$ v.
 1 = $\frac{1}{3}$ v. 5 = $\frac{1}{5}$ v. 7 = $\frac{1}{10}$ v. 5 = $\frac{1}{4}$ v.
 2 = $\frac{1}{5}$ v. 9 = $\frac{1}{9}$ v. 8 = $\frac{1}{6}$ v. 8 = $\frac{1}{8}$ v.
 4 = $\frac{1}{4}$ v. 4 = $\frac{1}{9}$ v. 6 = $\frac{1}{8}$ v. 7 = $\frac{1}{3}$ v.
 2 = $\frac{1}{3}$ v. 6 = $\frac{1}{6}$ v. 4 = $\frac{1}{4}$ v. 6 = $\frac{1}{7}$ v.
 6 = $\frac{1}{5}$ v. 9 = $\frac{1}{4}$ v. 5 = $\frac{1}{6}$ v. 7 = $\frac{1}{8}$ v.
 4 = $\frac{1}{8}$ v. 5 = $\frac{1}{7}$ v. 8 = $\frac{1}{5}$ v. 7 = $\frac{1}{7}$ v.

*) Wird gelesen Die Hälfte von 8 ist 4 u. f. w.

IV.

- | | | |
|---|---|--|
| 1) $(\frac{1}{3} \text{ v. } 12) + 9$
$(\frac{1}{5} \text{ v. } 35) + 12$
$(\frac{1}{9} \text{ v. } 81) + 19$
$(\frac{1}{2} \text{ v. } 16) + 28$
$(\frac{1}{3} \text{ v. } 18) + 30$
$(\frac{1}{4} \text{ v. } 28) + 39$ | 2) $25 + (\frac{1}{6} \text{ v. } 42)$
$38 + (\frac{1}{8} \text{ v. } 40)$
$19 + (\frac{1}{9} \text{ v. } 63)$
$36 + (\frac{1}{6} \text{ v. } 36)$
$48 + (\frac{1}{8} \text{ v. } 56)$
$56 + (\frac{1}{7} \text{ v. } 28)$ | 3) $22 - (\frac{1}{6} \text{ v. } 54)$
$41 - (\frac{1}{8} \text{ v. } 48)$
$35 - (\frac{1}{9} \text{ v. } 54)$
$80 - (\frac{1}{7} \text{ v. } 42)$
$63 - (\frac{1}{7} \text{ v. } 63)$
$100 - (\frac{1}{4} \text{ v. } 24)$ |
| 4) $\frac{1}{3} \text{ v. } (5 \times 6)$
$\frac{1}{8} \text{ v. } (6 \times 4)$
$\frac{1}{6} \text{ v. } (4 \times 9)$
$\frac{1}{4} \text{ v. } (8 \times 5)$
$\frac{1}{7} \text{ v. } (7 \times 9)$
$\frac{1}{10} \text{ v. } (6 \times 5)$
$\frac{1}{9} \text{ v. } (6 \times 6)$ | 5) $\frac{1}{8} \text{ v. } (57 + 7)$
$\frac{1}{7} \text{ v. } (29 + 6)$
$\frac{1}{9} \text{ v. } (45 + 9)$
$\frac{1}{8} \text{ v. } (39 + 9)$
$\frac{1}{8} \text{ v. } (74 + 6)$
$\frac{1}{9} \text{ v. } (65 + 7)$
$\frac{1}{10} \text{ v. } (61 + 9)$ | 6) $\frac{1}{5} \text{ v. } (22 - 7)$
$\frac{1}{8} \text{ v. } (32 - 8)$
$\frac{1}{9} \text{ v. } (24 - 6)$
$\frac{1}{7} \text{ v. } (30 - 9)$
$\frac{1}{6} \text{ v. } (31 - 7)$
$\frac{1}{9} \text{ v. } (90 - 9)$
$\frac{1}{8} \text{ v. } (53 - 8)$ |

V. *)

Wie oft steckt:

- 1) 2 in 5, 11, 7, 13; — 9, 17, 15, 19?
- 2) 3 in 10, 19, 23, 25, 11, 28; — 22, 13, 29, 20, 14, 26?
- 3) 4 in 11, 18, 22, 27, 34, 29; — 25, 33, 23, 37, 31, 39?
- 4) 5 in 16, 23, 34, 31, 22, 46; — 27, 37, 24, 43, 29, 48?
- 5) 6 in 14, 26, 43, 21, 58, 20; — 44, 16, 39, 49, 32, 28?
- 6) 6 in 33, 57, 37, 46, 27, 38; — 45, 51, 56, 35, 29, 53?
- 7) 7 in 15, 30, 22, 18, 36, 27; — 44, 66, 24, 38, 60, 31?
- 8) 7 in 39, 48, 55, 57, 50, 65; — 62, 47, 53, 40, 34, 68?
- 9) 8 in 20, 26, 15, 33, 30, 45; — 38, 27, 13, 37, 49, 42?
- 10) 8 in 22, 47, 50, 35, 58, 46; — 29, 73, 60, 78, 66, 63?
- 11) 9 in 15, 28, 20, 38, 26, 47; — 44, 30, 25, 40, 34, 50?
- 12) 9 in 39, 31, 64, 60, 48, 74; — 70, 25, 80, 84, 62, 88?
- 13) 10 in 35, 58, 22, 81, 63, 44; — 79, 16, 93, 52, 19, 37?

*) Schriftliche Darstellung: 2 in 5 = 2, N. 1 u. s. w. Siehe Wegweiser.

VI.)*

Wie viel beträgt:

- 1)** $\frac{1}{2}$ v. 7, 13, 5, 17; — 11, 15, 19, 9?
2) $\frac{1}{3}$ v. 7, 10, 16, 14, 25, 23; — 29, 11, 13, 20, 26, 5?
3) $\frac{1}{4}$ v. 13, 10, 19, 23, 17, 26; — 33, 30, 22, 37, 27, 35?
4) $\frac{1}{5}$ v. 16, 9, 27, 14, 23, 31; — 29, 44, 34, 47, 13, 37?
5) $\frac{1}{6}$ v. 19, 29, 49, 39, 23, 43; — 40, 55, 35, 45, 14, 50?
6) $\frac{1}{7}$ v. 20, 30, 40, 50, 60, 25; — 45, 55, 65, 58, 41, 48?
7) $\frac{1}{8}$ v. 26, 43, 12, 51, 20, 60; — 35, 65, 62, 43, 75, 55?
8) $\frac{1}{9}$ v. 29, 26, 39, 66, 17, 50; — 88, 60, 44, 74, 70, 53?
9) $\frac{1}{10}$ v. 36, 45, 13, 99, 27, 54; — 72, 84, 25, 61, 47, 92?

VII.

- 1)** $\frac{1}{6}$ v. 20 = **2)** $\frac{1}{8}$ v. 35 = **3)** $\frac{1}{9}$ v. 50 = **4)** $\frac{1}{5}$ v. 48 =
 $\frac{1}{8}$ v. 60 = $\frac{1}{2}$ v. 17 = $\frac{1}{7}$ v. 52 = $\frac{1}{9}$ v. 41 =
 $\frac{1}{5}$ v. 23 = $\frac{1}{9}$ v. 35 = $\frac{1}{4}$ v. 33 = $\frac{1}{7}$ v. 45 =
 $\frac{1}{5}$ v. 38 = $\frac{1}{6}$ v. 44 = $\frac{1}{8}$ v. 51 = $\frac{1}{4}$ v. 31 =
 $\frac{1}{7}$ v. 38 = $\frac{1}{3}$ v. 29 = $\frac{1}{6}$ v. 56 = $\frac{1}{5}$ v. 67 =
 $\frac{1}{4}$ v. 26 = $\frac{1}{5}$ v. 27 = $\frac{1}{2}$ v. 19 = $\frac{1}{7}$ v. 60 =

VIII.

- 1)** 2 in 40 = **2)** 2 in 24 = **3)** 2 in 66 = **4)** 6 in 66 =
4 in 80 = 3 in 39 = 3 in 96 = 2 in 82 =
3 in 60 = 2 in 28 = 2 in 84 = 3 in 66 =
5 in 100 = 4 in 48 = 5 in 55 = 2 in 48 =
2 in 60 = 2 in 42 = 3 in 63 = 3 in 93 =
3 in 90 = 3 in 69 = 2 in 68 = 9 in 99 =
2 in 80 = 4 in 88 = 3 in 36 = 2 in 86 =
2 in 100 = 2 in 64 = 4 in 84 = 4 in 88 =
- 5)** 2 in 25 = **6)** 2 in 85 = **7)** 3 in 68 = **8)** 3 in 32 =
2 in 43 = 3 in 95 = 4 in 43 = 7 in 74 =
3 in 34 = 2 in 29 = 5 in 58 = 4 in 82 =
2 in 67 = 4 in 86 = 2 in 81 = 8 in 89 =
4 in 45 = 2 in 49 = 6 in 68 = 9 in 95 =

*) Schriftliche Darstellung: $\frac{1}{2}$ v. 7 = 3, R. 1 u. s. w. Siehe Wegweiser.

IX.

1) $\frac{1}{3}$ v. 60 =	2) $\frac{1}{2}$ v. 26 =	3) $\frac{1}{3}$ v. 66 =	4) $\frac{1}{2}$ v. 84 =
$\frac{1}{2}$ v. 40 =	$\frac{1}{3}$ v. 36 =	$\frac{1}{4}$ v. 48 =	$\frac{1}{3}$ v. 96 =
$\frac{1}{3}$ v. 90 =	$\frac{1}{2}$ v. 24 =	$\frac{1}{2}$ v. 64 =	$\frac{1}{4}$ v. 88 =
$\frac{1}{2}$ v. 80 =	$\frac{1}{3}$ v. 63 =	$\frac{1}{5}$ v. 55 =	$\frac{1}{2}$ v. 68 =
$\frac{1}{4}$ v. 80 =	$\frac{1}{4}$ v. 44 =	$\frac{1}{3}$ v. 39 =	$\frac{1}{3}$ v. 69 =
$\frac{1}{2}$ v. 100 =	$\frac{1}{2}$ v. 42 =	$\frac{1}{4}$ v. 84 =	$\frac{1}{2}$ v. 82 =

5) $\frac{1}{2}$ v. 23 =	6) $\frac{1}{3}$ v. 94 =	7) $\frac{1}{3}$ v. 38 =	8) $\frac{1}{4}$ v. 85 =
$\frac{1}{3}$ v. 32 =	$\frac{1}{2}$ v. 49 =	$\frac{1}{3}$ v. 65 =	$\frac{1}{5}$ v. 58 =
$\frac{1}{2}$ v. 45 =	$\frac{1}{4}$ v. 47 =	$\frac{1}{3}$ v. 98 =	$\frac{1}{7}$ v. 79 =
$\frac{1}{4}$ v. 49 =	$\frac{1}{5}$ v. 56 =	$\frac{1}{2}$ v. 67 =	$\frac{1}{4}$ v. 89 =
$\frac{1}{2}$ v. 63 =	$\frac{1}{2}$ v. 81 =	$\frac{1}{2}$ v. 85 =	$\frac{1}{2}$ v. 69 =

X.

1) 2 in 30 =	2) 5 in 60 =	3) 5 in 90 =	4) 2 in 90 =
2 in 50 =	6 in 90 =	2 in 70 =	5 in 80 =
4 in 60 =	5 in 70 =	4 in 100 =	6 in 90 =

5) 2 in 36, 52, 38, 56, 74; — 32, 58, 92, 76, 98.

6) 3 in 42, 48, 51, 45, 57; — 72, 81, 54, 78, 84.

7) 4 in 56, 72, 52, 96, 76; — 92, 64, 60, 100, 68.

8) 5 in 60, 75, 55, 80, 95; — 70, 85, 65, 90, 100.

9) 5 in 65 =	10) 5 in 75 =	11) 6 in 84 =	12) 5 in 95 =
6 in 72 =	6 in 96 =	5 in 85 =	6 in 78 =
7 in 84 =	7 in 91 =	8 in 96 =	4 in 92 =

XI.

1) $\frac{1}{2}$ v. 50 =	2) $\frac{1}{2}$ v. 32 =	3) $\frac{1}{3}$ v. 57 =	4) $\frac{1}{2}$ v. 72 =
$\frac{1}{4}$ v. 60 =	$\frac{1}{3}$ v. 45 =	$\frac{1}{4}$ v. 52 =	$\frac{1}{6}$ v. 78 =
$\frac{1}{5}$ v. 70 =	$\frac{1}{4}$ v. 56 =	$\frac{1}{5}$ v. 65 =	$\frac{1}{4}$ v. 92 =
$\frac{1}{2}$ v. 90 =	$\frac{1}{2}$ v. 38 =	$\frac{1}{6}$ v. 72 =	$\frac{1}{3}$ v. 54 =
$\frac{1}{6}$ v. 90 =	$\frac{1}{3}$ v. 48 =	$\frac{1}{2}$ v. 98 =	$\frac{1}{8}$ v. 96 =
$\frac{1}{5}$ v. 80 =	$\frac{1}{4}$ v. 72 =	$\frac{1}{3}$ v. 81 =	$\frac{1}{2}$ v. 94 =
$\frac{1}{2}$ v. 70 =	$\frac{1}{5}$ v. 75 =	$\frac{1}{4}$ v. 68 =	$\frac{1}{3}$ v. 84 =
$\frac{1}{4}$ v. 100 =	$\frac{1}{2}$ v. 54 =	$\frac{1}{7}$ v. 84 =	$\frac{1}{7}$ v. 91 =

XII.)*

1) 1 in 30 =	2) 1 in 25 =	3) 1 in 36 =	4) 1 in 48 =
2 in 30 =	2 in 25 =	2 in 36 =	2 in 48 =
3 in 30 =	3 in 25 =	3 in 36 =	3 in 48 =
bis	bis	bis	bis
10 in 30 =	10 in 25 =	10 in 36 =	10 in 48 =

5) 25 = 1 × 25	6) 50 = 1 × ?	7) 100 = 1 × ?
25 = 2 × 12 + 1	50 = 2 × ?	100 = 2 × ?
25 = 3 × 8 + 1	50 = 3 × ?	100 = 3 × ?
bis	bis	bis
25 = 10 × ?	50 = 10 × ?	100 = 10 × ?

8) $\frac{1}{2}$ v. 37, 55, 97, 59, 73, 35, 93, 77.

9) $\frac{1}{3}$ v. 73, 44, 85, 56, 49, 89, 71, 91.

10) $\frac{1}{4}$ v. 63, 55, 73, 99, 67, 93, 59, 77.

11) $\frac{1}{5}$ v. 77, 62, 87, 93, 69, 99, 71, 82.

12) $\frac{1}{6}$ v. 74, 85, 63, 98, 92, 65, 80, 100.

*) Man lasse auch mit anderen Zahlen solche Reihen bilden; siehe Wegweiser, 2. Stufe, Enthaltensein.

Das Einmaleins.

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

Im Verlage von Franz Kluge in Reval sind von
 Wilh. Kellner folgende arithmetische Lehr- und Lernmittel erschienen

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Sechstes Heft: Zinsrechnung. Verhältnisbestimmungen. Gesellschaftsrechnung. Mischungsrechnung. Kettenrechnung. — Abgekürzte Multiplikation und Division der Dezimalbrüche. Wurzelrechnung. (Mit Erklärungen.) Stufe VIII. 3. Auflage. 1885 Preis 30 Kopeken.

4. Resultate der methodisch-geordneten Aufgaben für das Tafelrechnen.

Erstes und zweites Heft (zusammen). 3. Auflage. 1883. Preis 25 Kopeken.

Drittes, viertes (4. Aufl. 1886) u. fünftes Heft. 3. Aufl. 1886. à 25 Kopeken.

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5. Wiederholungsbüchlein für den Rechenunterricht

in den unteren Klassen der Gymnasien, in Kreissschulen und in höheren Mädchenschulen. 2. Auflage. 1883 Preis 25 Kopeken.

6. Arithmetische Extemporal-Aufgaben.

Inhalt: Gewöhnliche und Dezimalbrüche mit unbenannten und mehrfachbenannten Zahlen. — Regeldetri. 2. Auflage. 1882. Preis 10 Kopeken.

7. Ausführliche Anweisung für den Rechenunterricht

im Zahlenkreise von 1—100. Eine Zugabe zum Wegweiser für den Rechenunterricht in Elementarschulen. 1885 Preis 30 Kopeken.

8. Zahlentafel zu Fr. Wilh. Kellners methodischen Rechenwerken.

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