

41831

1

# Rechenbuch

für

österreichische allgemeine Volksschulen.

Ausgabe in drei Theilen.

Erster Theil: Unterstufe.

Von

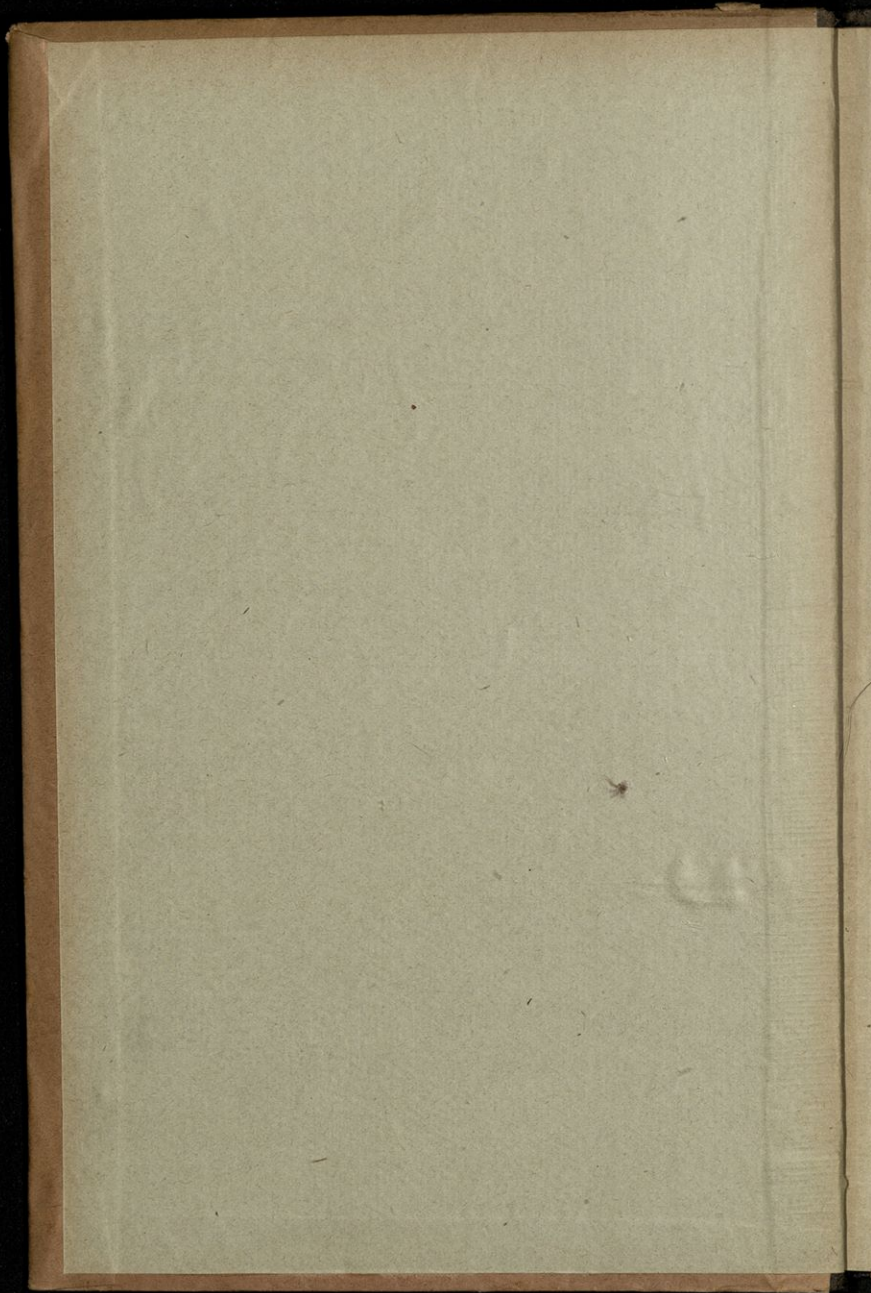
Dr. Fr. Ritter v. Moink.



Preis, gebunden, 30 Heller.

Wien.

Kaiserlich-königlicher Schulbücher-Verlag.







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Dr. Fr. Ritter v. Mořnik.

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(Auf die Kronenwährung umgestellte Ausgabe des Textes vom Jahre 1893.)



Preis, gebunden, 30 Heller.

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Wien.

Kaiserlich-königlicher Schulbücher-Verlag.

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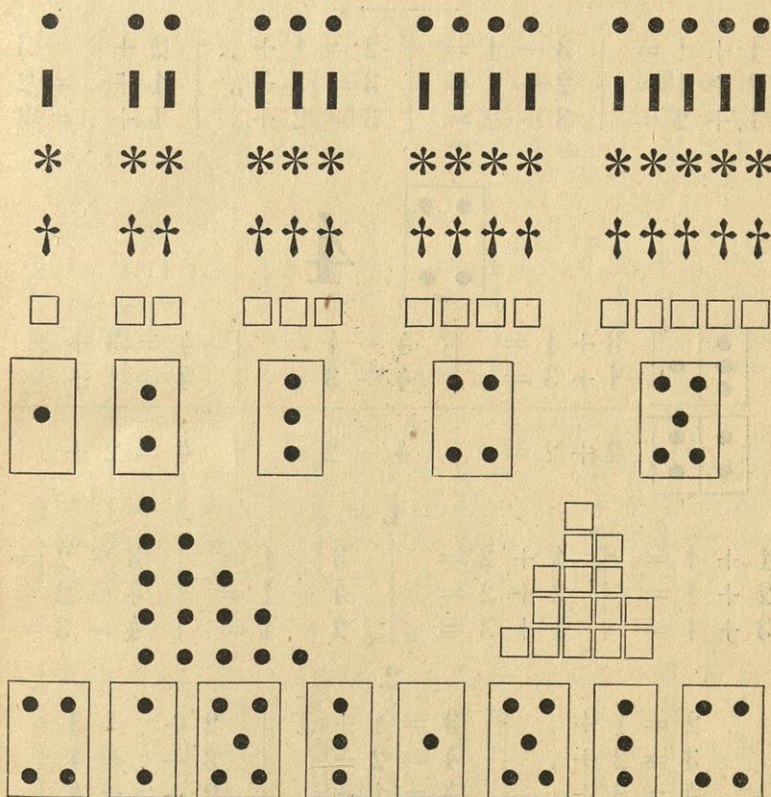
030038299

# Erste Abtheilung.

## 1. Zahlenraum von eins bis zehn.

### Zahlen von eins bis fünf.

(Anschauung, Zuzählen und Wegzählen.)





1



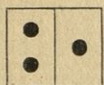
2



$$1 + 1 = \quad | \quad 2 - 1 = \quad | \quad 2 = 1 + .$$



3



$$\begin{array}{l} 2 + 1 = \quad | \quad 3 - 1 = \quad | \quad 3 = 2 + . \\ 1 + 2 = \quad | \quad 3 - 2 = \quad | \quad 3 = 1 + . \end{array}$$

$$\begin{array}{l} 1 + 1 = \quad | \quad 3 - 1 = \quad | \quad 2 = 1 + . \quad | \quad 2 + . = 3 \\ 2 + 1 = \quad | \quad 2 - 1 = \quad | \quad 3 = 1 + . \quad | \quad 1 + . = 2 \\ 1 + 2 = \quad | \quad 3 - 2 = \quad | \quad 3 = 2 + . \quad | \quad 1 + . = 3 \end{array}$$



4



$$\begin{array}{l} 3 + 1 = \quad | \quad 4 - 1 = \quad | \quad 4 = 3 + . \\ 1 + 3 = \quad | \quad 4 - 3 = \quad | \quad 4 = 1 + . \end{array}$$



$$2 + 2 = \quad | \quad 4 - 2 = \quad | \quad 4 = 2 + .$$

- 1. -

$$\begin{array}{l} 1 + 1 = \quad | \quad 1 + 2 = \quad | \quad 3 - 1 = \quad | \quad 3 - 2 = \\ 2 + 1 = \quad | \quad 2 + 2 = \quad | \quad 4 - 1 = \quad | \quad 4 - 2 = \\ 3 + 1 = \quad | \quad 1 + 3 = \quad | \quad 2 - 1 = \quad | \quad 4 - 3 = \end{array}$$

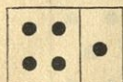
- 2. -

$$\begin{array}{l} 2 = 1 + . \quad | \quad 3 = 1 + . \quad | \quad 2 + . = 3 \\ 3 = 2 + . \quad | \quad 4 = 2 + . \quad | \quad 3 + . = 4 \\ 4 = 3 + . \quad | \quad 4 = 1 + . \quad | \quad 2 + . = 4 \end{array}$$





5



$4 + 1 =$

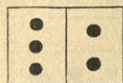
$5 - 1 =$

$5 = 4 + .$

$1 + 4 =$

$5 - 4 =$

$5 = 1 + .$



$3 + 2 =$

$5 - 2 =$

$5 = 3 + .$

$2 + 3 =$

$5 - 3 =$

$5 = 2 + .$

- 1. -

$1 + 1 =$

$2 + 1 =$

$1 + 2 =$

$1 + 4 =$

$4 + 1 =$

$3 + 2 =$

$1 + 3 =$

$3 + 1 =$

$3 + 1 =$

$2 + 2 =$

$2 + 3 =$

$3 + 2 =$

- 2. -

$2 - 1 =$

$5 - 1 =$

$4 - 2 =$

$5 - 4 =$

$3 - 1 =$

$3 - 2 =$

$4 - 3 =$

$3 - 2 =$

$4 - 1 =$

$5 - 2 =$

$5 - 3 =$

$4 - 1 =$

- 3. -

$2 = 1 + .$

$3 + . = 4$

$2 + . = 4$

$5 = 4 + .$

$2 + . = 3$

$1 + . = 4$

$4 = 2 + .$

$1 + . = 3$

$2 + . = 5$

$5 = 1 + .$

$3 + . = 5$

$1 + . = 5$

- 4. -

$1 + 1 + 1 =$

$2 + 1 + 2 =$

$2 + 2 - 1 =$

$2 + 1 + 1 =$

$2 + 2 + 1 =$

$4 + 1 - 3 =$

$1 + 2 + 1 =$

$1 + 1 + 2 =$

$2 + 3 - 4 =$

$1 + 3 + 1 =$

$1 + 1 + 3 =$

$1 + 4 - 2 =$

- 5. -

$3 - 1 - 1 =$

$5 - 1 - 2 =$

$5 - 3 + 1 =$

$5 - 1 - 1 =$

$5 - 1 - 3 =$

$4 - 2 + 3 =$

$4 - 1 - 2 =$

$5 - 2 - 2 =$

$2 - 1 + 4 =$

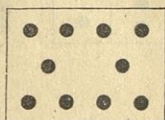
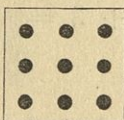
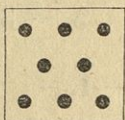
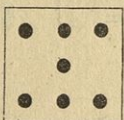
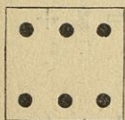
$4 - 2 - 1 =$

$5 - 3 - 1 =$

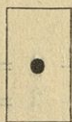
$5 - 4 + 2 =$

## Zahlen von eins bis zehn.

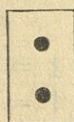
(Allseitige Behandlung.)



i 1



2



$$\begin{aligned} 1 + 1 &= \\ 2 - 1 &= \\ 2 &= 1 + \end{aligned}$$

$$\begin{aligned} 2 \times 1 &= \\ 1 \text{ in } 2 &= \\ \frac{1}{2} \text{ v. } 2 &= \end{aligned}$$



3



$$1 + 1 + 1 =$$

$$\begin{aligned} 3 \times 1 &= \\ 1 \text{ in } 3 &= \\ \frac{1}{3} \text{ v. } 3 &= \end{aligned}$$



$$\begin{aligned} 2 + 1 &= \\ 1 + 2 &= \\ 3 - 1 &= \\ 3 - 2 &= \end{aligned}$$

$$\begin{aligned} 3 &= 2 + \\ 3 &= 1 + \\ 2 \text{ in } 3 &= 1 (1) \end{aligned}$$

$2 + 1 =$	$3 - 1 =$	$3 \times 1 =$	$1 \text{ in } 3 =$
$1 + 1 =$	$3 - 2 =$	$2 \times 1 =$	$1 \text{ in } 2 =$
$1 + 2 =$	$2 = 1 + .$	$1 \times 1 =$	$\frac{1}{2} \text{ v. } 2 =$
$2 - 1 =$	$3 = 1 + .$	$1 \times 3 =$	$\frac{1}{3} \text{ v. } 3 =$



4



$1 + 1 + 1 + 1 =$

$4 \times 1 =$   
 $1 \text{ in } 4 =$   
 $\frac{1}{2} \text{ v. } 4 =$



$2 + 2 =$

$2 \times 2 =$

$4 - 2 =$

$2 \text{ in } 4 =$

$4 = 2 + .$

$\frac{1}{2} \text{ v. } 4 =$



$3 + 1 =$

$4 = 3 + .$

$1 + 3 =$

$4 = 1 + .$

$4 - 1 =$

$1 \times 3 + 1 =$

$4 - 3 =$

$3 \text{ in } 4 =$

- 1. -

$2 + 1 =$

$1 + 2 =$

$4 - 1 =$

$3 - 2 =$

$3 + 1 =$

$2 + 2 =$

$4 - 2 =$

$3 - 3 =$

$1 + 1 =$

$2 - 1 =$

$4 - 3 =$

$1 - 1 =$

$1 + 3 =$

$3 - 1 =$

$4 - 4 = 0$

$2 - 2 =$

- 2. -

$4 = 2 + .$

$1 + . = 3$

$2 + 1 + 1 =$

$4 = 1 + .$

$2 + . = 4$

$3 + 1 - 2 =$

$3 = 2 + .$

$3 + . = 4$

$4 - 2 - 1 =$

- 3. -

$2 \times 1 =$

$2 \text{ in } 4 =$

$\frac{1}{2} \text{ v. } 2 =$

$4 \times 1 =$

$1 \text{ in } 3 =$

$\frac{1}{2} \text{ v. } 4 =$

$1 \times 4 =$

$1 \text{ in } 4 =$

$\frac{1}{3} \text{ v. } 3 =$

$2 \times 2 =$

$2 \text{ in } 3 =$

$\frac{1}{4} \text{ v. } 4 =$

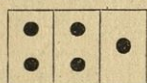


5



$$1 + 1 + 1 + 1 + 1 =$$

$$5 \times 1 = \quad | \quad 1 \text{ in } 5 = \quad | \quad \frac{1}{5} \text{ v. } 5 =$$



$$2 + 2 + 1 = \quad | \quad 2 \text{ in } 5 =$$

$$2 \times 2 + 1 =$$

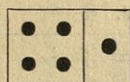


$$3 + 2 = \quad | \quad 5 = 3 + .$$

$$2 + 3 = \quad | \quad 5 = 2 + .$$

$$5 - 2 = \quad | \quad 1 \times 3 + 2 =$$

$$5 - 3 = \quad | \quad 3 \text{ in } 5 =$$



$$4 + 1 = \quad | \quad 5 = 4 + .$$

$$1 + 4 = \quad | \quad 5 = 1 + .$$

$$5 - 1 = \quad | \quad 1 \times 4 + 1 =$$

$$5 - 4 = \quad | \quad 4 \text{ in } 5 =$$

- 1. -

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

- 2. -

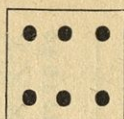
$3 = 2 + .$	$1 + . = 3$	$2 + 1 + 2 =$
$4 = 3 + .$	$4 + . = 5$	$5 - 1 - 2 =$
$5 = 2 + .$	$3 + . = 5$	$3 + 2 - 1 =$
$4 = 2 + .$	$2 + . = 5$	$5 - 4 + 3 =$

- 3. -

$3 \times 1 =$	$1 \times 5 =$	$1 \text{ in } 5 =$	$\frac{1}{2} \text{ v. } 2 =$
$2 \times 2 =$	$1 \times 4 =$	$2 \text{ in } 4 =$	$\frac{1}{4} \text{ v. } 4 =$
$5 \times 1 =$	$1 \times 2 =$	$2 \text{ in } 5 =$	$\frac{1}{2} \text{ v. } 4 =$
$4 \times 1 =$	$1 \times 1 =$	$4 \text{ in } 5 =$	$\frac{1}{5} \text{ v. } 5 =$

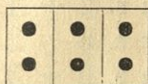
iiiiiii

6



$$1 + 1 + 1 + 1 + 1 + 1 =$$

$$6 \times 1 = \quad | \quad 1 \text{ in } 6 = \quad | \quad \frac{1}{6} \text{ v. } 6 =$$



$$2 + 2 + 2 = \quad | \quad 2 \text{ in } 6 =$$

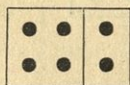
$$3 \times 2 = \quad | \quad \frac{1}{3} \text{ v. } 6 =$$



$$3 + 3 = \quad | \quad 2 \times 3 =$$

$$6 - 3 = \quad | \quad 3 \text{ in } 6 =$$

$$6 = 3 + . \quad | \quad \frac{1}{2} \text{ v. } 6 =$$

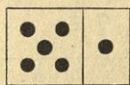


$$4 + 2 = \quad | \quad 6 = 4 + .$$

$$2 + 4 = \quad | \quad 6 = 2 + .$$

$$6 - 2 = \quad | \quad 1 \times 4 + 2 =$$

$$6 - 4 = \quad | \quad 4 \text{ in } 6 =$$



$$5 + 1 = \quad | \quad 6 = 5 + .$$

$$1 + 5 = \quad | \quad 6 = 1 + .$$

$$6 - 1 = \quad | \quad 1 \times 5 + 1 =$$

$$6 - 5 = \quad | \quad 5 \text{ in } 6 =$$

- 1. -

$$2 + 1 = \quad | \quad 4 + 1 = \quad | \quad 3 + 2 = \quad | \quad 3 + 3 =$$

$$2 - 1 = \quad | \quad 4 - 1 = \quad | \quad 3 - 2 = \quad | \quad 3 - 3 =$$

$$3 + 1 = \quad | \quad 5 + 1 = \quad | \quad 4 + 2 = \quad | \quad 1 + 3 =$$

$$3 - 1 = \quad | \quad 5 - 1 = \quad | \quad 4 - 2 = \quad | \quad 6 - 3 =$$

- 2. -

$$1 + 4 = \quad | \quad 1 + 5 = \quad | \quad 6 = 4 + . \quad | \quad 2 + . = 3$$

$$6 - 4 = \quad | \quad 6 - 5 = \quad | \quad 4 = 1 + . \quad | \quad 1 + . = 6$$

$$2 + 4 = \quad | \quad 1 + 1 = \quad | \quad 5 = 3 + . \quad | \quad 4 + . = 5$$

$$5 - 4 = \quad | \quad 6 - 6 = \quad | \quad 6 = 2 + . \quad | \quad 2 + . = 6$$

- 3. -

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

$$2 + 3 - 4 = \quad | \quad 1 + 5 - 3 = \quad | \quad 4 + 2 - 5 =$$

$$5 - 1 + 2 = \quad | \quad 6 - 5 + 4 = \quad | \quad 4 - 3 + 5 =$$

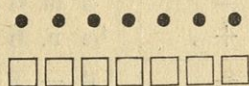
$$6 - 3 - 1 = \quad | \quad 6 - 4 - 2 = \quad | \quad 5 - 1 - 4 =$$

## - 4. -

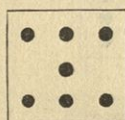
$3 \times 2 =$	$2 \times . = 4$	$1 \text{ in } 6 =$	$\frac{1}{2} \text{ v. } 6 =$
$2 \times 3 =$	$2 \times . = 6$	$2 \text{ in } 4 =$	$\frac{1}{2} \text{ v. } 4 =$
$2 \times 2 =$	$3 \times . = 3$	$2 \text{ in } 6 =$	$\frac{1}{3} \text{ v. } 6 =$
$6 \times 1 =$	$3 \times . = 6$	$3 \text{ in } 6 =$	$\frac{1}{6} \text{ v. } 6 =$

## - 5. -

$3 \times 1 + 2 =$	$2 \times 2 + 2 =$	$\frac{1}{2} \text{ v. } 2 + 4 =$
$2 \times 3 - 4 =$	$6 \times 1 - 5 =$	$\frac{1}{3} \text{ v. } 6 - 2 =$
$1 \times 5 - 3 =$	$3 \times 2 - 1 =$	$\frac{1}{2} \text{ v. } 6 + 3 =$



7



$$1 + 1 + 1 + 1 + 1 + 1 + 1 =$$

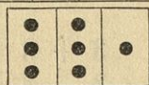
$$7 \times 1 = \quad | \quad 1 \text{ in } 7 = \quad | \quad \frac{1}{7} \text{ v. } 7 =$$



$$2 + 2 + 2 + 1 =$$

$$3 \times 2 + 1 =$$

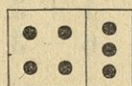
$$2 \text{ in } 7 =$$



$$3 + 3 + 1 =$$

$$2 \times 3 + 1 =$$

$$3 \text{ in } 7 =$$



$$4 + 3 =$$

$$7 = 4 + .$$

$$3 + 4 =$$

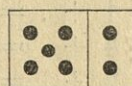
$$7 = 3 + .$$

$$7 - 3 =$$

$$1 \times 4 + 3 =$$

$$7 - 4 =$$

$$4 \text{ in } 7 =$$



$$5 + 2 =$$

$$7 = 5 + .$$

$$2 + 5 =$$

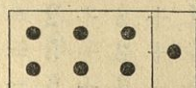
$$7 = 2 + .$$

$$7 - 2 =$$

$$1 \times 5 + 2 =$$

$$7 - 5 =$$

$$5 \text{ in } 7 =$$



$$6 + 1 =$$

$$7 = 6 + .$$

$$1 + 6 =$$

$$7 = 1 + .$$

$$7 - 1 =$$

$$1 \times 6 + 1 =$$

$$7 - 6 =$$

$$6 \text{ in } 7 =$$

## - 1. -

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

## - 2. -

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

## - 3. -

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

## - 4. -

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

## - 5. -

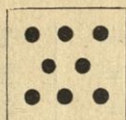
$1 \times 2 =$	$6 = 3 \times .$	$2 \text{ in } 4 =$	$1/2 \text{ v. } 4 =$
$2 \times 2 =$	$4 = 2 \times .$	$2 \text{ in } 6 =$	$1/2 \text{ v. } 6 =$
$3 \times 2 =$	$2 = 1 \times .$	$3 \text{ in } 6 =$	$1/3 \text{ v. } 3 =$
$2 \times 3 =$	$6 = 2 \times .$	$4 \text{ in } 7 =$	$1/3 \text{ v. } 6 =$
$7 \times 1 =$	$7 = 1 \times .$	$5 \text{ in } 7 =$	$1/4 \text{ v. } 4 =$

## - 6. -

$1 \times 5 + 2 =$	$1 \times 6 - 4 =$	$1/2 \text{ v. } 4 + 4 =$
$2 \times 3 - 3 =$	$4 \times 1 + 3 =$	$1/2 \text{ v. } 6 - 3 =$
$3 \times 2 + 1 =$	$1 \times 1 + 5 =$	$1/3 \text{ v. } 6 + 5 =$
$7 \times 1 - 4 =$	$7 \times 1 - 7 =$	$1/4 \text{ v. } 4 + 4 =$



8



$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 8 \times 1 = \quad | \quad 1 \text{ in } 8 = \quad | \quad \frac{1}{8} \text{ v. } 8 =$$



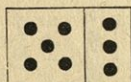
$$2 + 2 + 2 + 2 = 4 \times 2 = \quad | \quad 2 \text{ in } 8 = \frac{1}{4} \text{ v. } 8 =$$



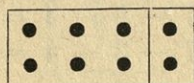
$$3 + 3 + 2 = 2 \times 3 + 2 = \quad | \quad 3 \text{ in } 8 =$$



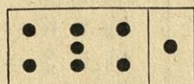
$$4 + 4 = 8 - 4 = 8 = 4 + . \quad | \quad 2 \times 4 = 4 \text{ in } 8 = \frac{1}{2} \text{ v. } 8 =$$



$$5 + 3 = 3 + 5 = 8 - 3 = 8 - 5 = \quad | \quad 8 = 5 + . 8 = 3 + . 1 \times 5 + 3 = 5 \text{ in } 8 =$$



$$6 + 2 = 2 + 6 = 8 - 2 = 8 - 6 = \quad | \quad 8 = 6 + . 8 = 2 + . 1 \times 6 + 2 = 6 \text{ in } 8 =$$



$$7 + 1 = 1 + 7 = 8 - 1 = 8 - 7 = \quad | \quad 8 = 7 + . 8 = 1 + . 1 \times 7 + 1 = 7 \text{ in } 8 =$$

- 1. -

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



## - 2. -

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

## - 3. -

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

## - 4. -

$8 = 3 + .$	$2 + . = 8$	$3 + 1 + 1 =$
$6 = 4 + .$	$6 + . = 7$	$4 + 2 + 1 =$
$7 = 5 + .$	$1 + . = 5$	$2 + 3 + 3 =$

## - 5. -

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

## - 6. -

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

## - 7. -

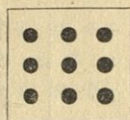
$2 \text{ in } 8 =$	$3 \text{ in } 6 =$	$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{3} \text{ v. } 6 =$
$2 \text{ in } 6 =$	$4 \text{ in } 8 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{4} \text{ v. } 8 =$
$2 \text{ in } 5 =$	$5 \text{ in } 7 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$

## - 8. -

$2 \times 2 + 4 =$	$2 \times 4 - 5 =$	$\frac{1}{2} \text{ v. } 4 + 5 =$
$3 \times 2 + 1 =$	$2 \times 3 - 2 =$	$\frac{1}{3} \text{ v. } 6 + 6 =$
$4 \times 1 + 3 =$	$7 \times 1 - 4 =$	$\frac{1}{2} \text{ v. } 8 - 3 =$



9



$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 =$$

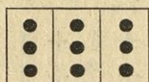
$$9 \times 1 = \quad | \quad 1 \text{ in } 9 = \quad | \quad \frac{1}{9} \text{ v. } 9 =$$



$$2 + 2 + 2 + 2 + 1 =$$

$$4 \times 2 + 1 =$$

$$2 \text{ in } 9 =$$



$$3 + 3 + 3 =$$

$$3 \times 3 =$$

$$3 \text{ in } 9 =$$

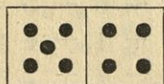
$$\frac{1}{3} \text{ v. } 9 =$$



$$4 + 4 + 1 =$$

$$2 \times 4 + 1 =$$

$$4 \text{ in } 9 =$$



$$5 + 4 =$$

$$4 + 5 =$$

$$9 - 4 =$$

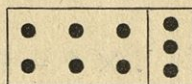
$$9 - 5 =$$

$$9 = 5 + .$$

$$9 = 4 + .$$

$$1 \times 5 + 4 =$$

$$5 \text{ in } 9 =$$



$$6 + 3 =$$

$$3 + 6 =$$

$$9 - 3 =$$

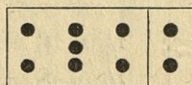
$$9 - 6 =$$

$$9 = 6 + .$$

$$9 = 3 + .$$

$$1 \times 6 + 3 =$$

$$6 \text{ in } 9 =$$



$$7 + 2 =$$

$$2 + 7 =$$

$$9 - 2 =$$

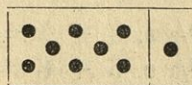
$$9 - 7 =$$

$$9 = 7 + .$$

$$9 = 2 + .$$

$$1 \times 7 + 2 =$$

$$7 \text{ in } 9 =$$



$$8 + 1 =$$

$$1 + 8 =$$

$$9 - 1 =$$

$$9 - 8 =$$

$$9 = 8 + .$$

$$9 = 1 + .$$

$$1 \times 8 + 1 =$$

$$8 \text{ in } 9 =$$

## - 1. -

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

## - 2. -

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

## - 3. -

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

## - 4. -

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

## - 5. -

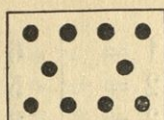
$2 \times 1 =$	$4 \times 2 =$	$1 \times 6 =$	$4 \times 1 =$
$1 \times 5 =$	$6 \times 1 =$	$2 \times 2 =$	$1 \times 9 =$
$2 \times 4 =$	$1 \times 8 =$	$1 \times 7 =$	$3 \times 2 =$
$3 \times 3 =$	$3 \times 1 =$	$2 \times 3 =$	$5 \times 1 =$

## - 6. -

$2 \text{ in } 6 =$	$3 \text{ in } 9 =$	$\frac{1}{4} \text{ v. } 4 =$	$\frac{1}{2} \text{ v. } 4 =$
$2 \text{ in } 4 =$	$4 \text{ in } 8 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{4} \text{ v. } 8 =$
$3 \text{ in } 6 =$	$3 \text{ in } 7 =$	$\frac{1}{5} \text{ v. } 5 =$	$\frac{1}{3} \text{ v. } 9 =$
$2 \text{ in } 8 =$	$5 \text{ in } 9 =$	$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{2} \text{ v. } 6 =$

## - 7. -

$8 = 2 \times .$	$. \times 2 = 4$	$2 \times 3 + 1 =$
$6 = 3 \times .$	$. \times 4 = 8$	$3 \times 3 - 7 =$
$9 = 3 \times .$	$. \times 2 = 6$	$\frac{1}{2} \text{ v. } 8 + 5 =$
$6 = 2 \times .$	$. \times 1 = 9$	$\frac{1}{3} \text{ v. } 9 - 2 =$


**10**


$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 =$$

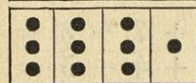
$$10 \times 1 = \quad | \quad 1 \text{ in } 10 = \quad | \quad \frac{1}{10} \text{ v. } 10 =$$



$$2 + 2 + 2 + 2 + 2 =$$

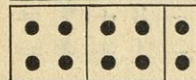
$$5 \times 2 = \quad | \quad 2 \text{ in } 10 =$$

$$\frac{1}{5} \text{ v. } 10 =$$



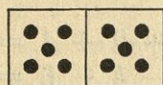
$$3 + 3 + 3 + 1 =$$

$$3 \times 3 + 1 = \quad | \quad 3 \text{ in } 10 =$$



$$4 + 4 + 2 =$$

$$2 \times 4 + 2 = \quad | \quad 4 \text{ in } 10 =$$



$$5 + 5 =$$

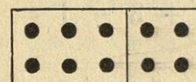
$$10 - 5 =$$

$$10 = 5 + .$$

$$2 \times 5 =$$

$$5 \text{ in } 10 =$$

$$\frac{1}{2} \text{ v. } 10 =$$



$$6 + 4 =$$

$$4 + 6 =$$

$$10 - 4 =$$

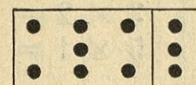
$$10 - 6 =$$

$$10 = 6 + .$$

$$10 = 4 + .$$

$$1 \times 6 + 4 =$$

$$6 \text{ in } 10 =$$



$$7 + 3 =$$

$$3 + 7 =$$

$$10 - 3 =$$

$$10 - 7 =$$

$$10 = 7 + .$$

$$10 = 3 + .$$

$$1 \times 7 + 3 =$$

$$7 \text{ in } 10 =$$



$$8 + 2 =$$

$$2 + 8 =$$

$$10 - 2 =$$

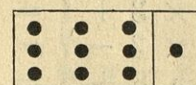
$$10 - 8 =$$

$$10 = 8 + .$$

$$10 = 2 + .$$

$$1 \times 8 + 2 =$$

$$8 \text{ in } 10 =$$



$$9 + 1 =$$

$$1 + 9 =$$

$$10 - 1 =$$

$$10 - 9 =$$

$$10 = 9 + .$$

$$10 = 1 + .$$

$$1 \times 9 + 1 =$$

$$9 \text{ in } 10 =$$

## - 1. -

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

## - 2. -

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

## - 3. -

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

## - 4. -

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

## - 5. -

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

## - 6. -

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

## - 7. -

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

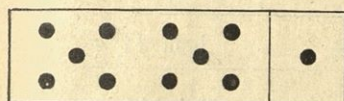
## - 8. -

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

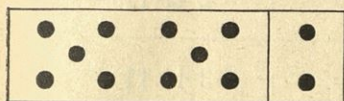
## - 9. -

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

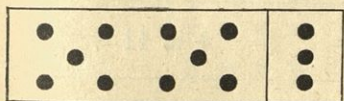
## II. Erweiterung des Zahlenraumes bis zwanzig.



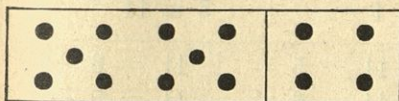
$$10 + 1 = 11$$



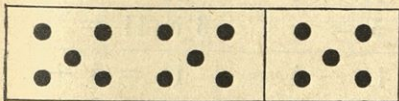
$$10 + 2 = 12$$



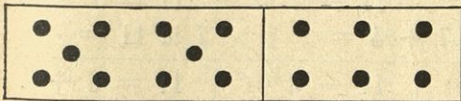
$$10 + 3 = 13$$



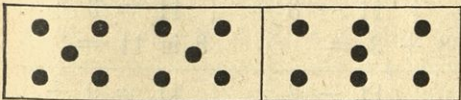
$$10 + 4 = 14$$



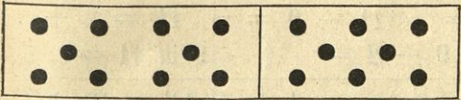
$$10 + 5 = 15$$



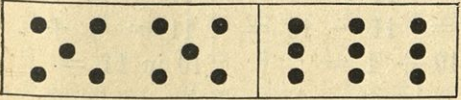
$$10 + 6 = 16$$



$$10 + 7 = 17$$



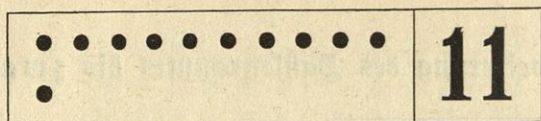
$$10 + 8 = 18$$



$$10 + 9 = 19$$



$$10 + 10 = 20$$



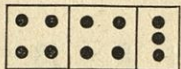
$$11 \times 1 = \quad | \quad 1 \text{ in } 11 =$$



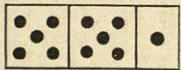
$$5 \times 2 + 1 = \quad | \quad 2 \text{ in } 11 =$$



$$3 \times 3 + 2 = \quad | \quad 3 \text{ in } 11 =$$



$$2 \times 4 + 3 = \quad | \quad 4 \text{ in } 11 =$$



$$2 \times 5 + 1 = \quad | \quad 5 \text{ in } 11 =$$



$$6 + 5 = \quad | \quad 11 - 5 = \quad | \quad 11 = 6 + .$$

$$5 + 6 = \quad | \quad 11 - 6 = \quad | \quad 11 = 5 + .$$

$$1 \times 6 + 5 = \quad | \quad 6 \text{ in } 11 =$$



$$7 + 4 = \quad | \quad 11 - 4 = \quad | \quad 11 = 4 + .$$

$$4 + 7 = \quad | \quad 11 - 7 = \quad | \quad 11 = 7 + .$$

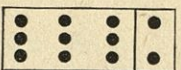
$$1 \times 7 + 4 = \quad | \quad 7 \text{ in } 11 =$$



$$8 + 3 = \quad | \quad 11 - 3 = \quad | \quad 11 = 8 + .$$

$$3 + 8 = \quad | \quad 11 - 8 = \quad | \quad 11 = 3 + .$$

$$1 \times 8 + 3 = \quad | \quad 8 \text{ in } 11 =$$



$$9 + 2 = \quad | \quad 11 - 2 = \quad | \quad 11 = 9 + .$$

$$2 + 9 = \quad | \quad 11 - 9 = \quad | \quad 11 = 2 + .$$

$$1 \times 9 + 2 = \quad | \quad 9 \text{ in } 11 =$$



$$10 + 1 = \quad | \quad 11 - 1 = \quad | \quad 11 = 10 + .$$

$$1 + 10 = \quad | \quad 11 - 10 = \quad | \quad 11 = 1 + .$$

$$1 \times 10 + 1 = \quad | \quad 10 \text{ in } 11 =$$

- 1. -

$1 + 1 =$	$6 + 1 =$	$2 - 1 =$	$7 - 1 =$
$2 + 1 =$	$7 + 1 =$	$3 - 1 =$	$8 - 1 =$
$3 + 1 =$	$8 + 1 =$	$4 - 1 =$	$9 - 1 =$
$4 + 1 =$	$9 + 1 =$	$5 - 1 =$	$10 - 1 =$
$5 + 1 =$	$10 + 1 =$	$6 - 1 =$	$11 - 1 =$



## - 2. -

$3 + 1 =$	$5 + 1 =$	$9 - 1 =$	$8 - 1 =$	$5 + 1 + 1 =$
$8 + 1 =$	$9 + 1 =$	$6 - 1 =$	$2 - 1 =$	$8 + 1 + 1 =$
$4 + 1 =$	$2 + 1 =$	$11 - 1 =$	$10 - 1 =$	$7 - 1 - 1 =$
$7 + 1 =$	$6 + 1 =$	$3 - 1 =$	$4 - 1 =$	$10 - 1 - 1 =$
$10 + 1 =$	$1 + 1 =$	$5 - 1 =$	$7 - 1 =$	$6 + 1 - 1 =$

## - 3. -

$8 + 1 =$	$5 + 5 =$	$7 + 4 =$	$9 + 2 =$	$3 + 8 =$
$9 + 2 =$	$4 + 6 =$	$7 + 3 = 10$	$5 + 6 =$	$2 + 9 =$
$7 + 3 =$	$3 + 7 =$	$10 + 1 = 11$	$8 + 3 =$	$6 + 5 =$
$6 + 4 =$	$2 + 8 =$	$7 + 4 = 11$	$4 + 7 =$	

## - 4. -

$10 - 1 =$	$10 - 7 =$	$11 - 4 =$	$11 - 2 =$	$11 - 6 =$
$10 - 2 =$	$10 - 5 =$	$11 - 1 = 10$	$11 - 5 =$	$11 - 9 =$
$10 - 4 =$	$10 - 6 =$	$10 - 3 = 7$	$11 - 8 =$	$11 - 7 =$
$10 - 8 =$	$10 - 3 =$	$11 - 4 = 7$	$11 - 3 =$	

## - 5. -

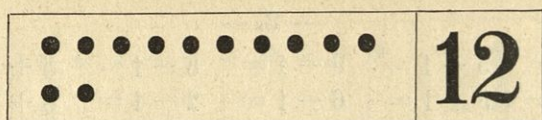
$5 \times 2 =$	$4 \times 1 =$	$6 = . \times 3$	$2 \times 4 + 3 =$
$2 \times 4 =$	$3 \times 2 =$	$8 = . \times 2$	$3 \times 2 + 5 =$
$3 \times 3 =$	$1 \times 9 =$	$10 = . \times 5$	$1 \times 5 + 4 =$
$4 \times 2 =$	$2 \times 2 =$	$9 = 3 \times .$	$5 \times 2 - 7 =$
$2 \times 3 =$	$2 \times 5 =$	$4 = 4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

## - 6. -

$2 \text{ in } 10 =$	$4 \text{ in } 4 =$	$2 \text{ in } 5 =$	$4 \text{ in } 6 =$	$7 \text{ in } 10 =$
$2 \text{ in } 6 =$	$4 \text{ in } 8 =$	$2 \text{ in } 9 =$	$4 \text{ in } 11 =$	$8 \text{ in } 9 =$
$2 \text{ in } 8 =$	$5 \text{ in } 10 =$	$2 \text{ in } 11 =$	$5 \text{ in } 7 =$	$8 \text{ in } 11 =$
$3 \text{ in } 9 =$	$6 \text{ in } 6 =$	$3 \text{ in } 8 =$	$5 \text{ in } 11 =$	$9 \text{ in } 10 =$
$3 \text{ in } 6 =$	$9 \text{ in } 9 =$	$3 \text{ in } 11 =$	$6 \text{ in } 11 =$	$9 \text{ in } 11 =$

## - 7. -

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



$$12 \times 1 = \quad | \quad 1 \text{ in } 12 =$$



$$6 \times 2 = \quad | \quad 2 \text{ in } 12 = \quad | \quad \frac{1}{6} \text{ v. } 12 =$$



$$4 \times 3 = \quad | \quad 3 \text{ in } 12 = \quad | \quad \frac{1}{4} \text{ v. } 12 =$$



$$3 \times 4 = \quad | \quad 4 \text{ in } 12 = \quad | \quad \frac{1}{3} \text{ v. } 12 =$$

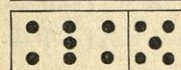


$$2 \times 5 + 2 = \quad | \quad 5 \text{ in } 12 =$$



$$6 + 6 = \quad | \quad 12 - 6 = \quad | \quad 12 = 6 + .$$

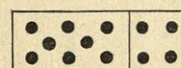
$$2 \times 6 = \quad | \quad 6 \text{ in } 12 = \quad | \quad \frac{1}{2} \text{ v. } 12 =$$



$$7 + 5 = \quad | \quad 12 - 5 = \quad | \quad 12 = 7 + .$$

$$5 + 7 = \quad | \quad 12 - 7 = \quad | \quad 12 = 5 + .$$

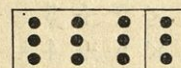
$$1 \times 7 + 5 = \quad | \quad 7 \text{ in } 12 =$$



$$8 + 4 = \quad | \quad 12 - 4 = \quad | \quad 12 = 8 + .$$

$$4 + 8 = \quad | \quad 12 - 8 = \quad | \quad 12 = 4 + .$$

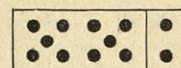
$$1 \times 8 + 4 = \quad | \quad 8 \text{ in } 12 =$$



$$9 + 3 = \quad | \quad 12 - 3 = \quad | \quad 12 = 9 + .$$

$$3 + 9 = \quad | \quad 12 - 9 = \quad | \quad 12 = 3 + .$$

$$1 \times 9 + 3 = \quad | \quad 9 \text{ in } 12 =$$



$$10 + 2 = \quad | \quad 12 - 2 = \quad | \quad 12 = 10 + .$$

$$2 + 10 = \quad | \quad 12 - 10 = \quad | \quad 12 = 2 + .$$

$$1 \times 10 + 2 = \quad | \quad 10 \text{ in } 12 =$$

- 1. -

$1 + 2 =$	$6 + 2 =$	$3 - 2 =$	$8 - 2 =$
$2 + 2 =$	$7 + 2 =$	$4 - 2 =$	$9 - 2 =$
$3 + 2 =$	$8 + 2 =$	$5 - 2 =$	$10 - 2 =$
$4 + 2 =$	$9 + 2 =$	$6 - 2 =$	$11 - 2 =$
$5 + 2 =$	$10 + 2 =$	$7 - 2 =$	$12 - 2 =$

- 2. -

$3 + 2 =$	$10 + 2 =$	$2 + 2 =$	$11 - 2 =$	$8 - 2 =$
$1 + 2 =$	$5 + 2 =$	$7 + 2 =$	$3 - 2 =$	$12 - 2 =$
$9 + 2 =$	$8 + 2 =$	$9 - 2 =$	$7 - 2 =$	$6 - 2 =$
$4 + 2 =$	$6 + 2 =$	$5 - 2 =$	$10 - 2 =$	$4 - 2 =$

## - 3. -

$7 + 2 + 2 =$	$10 - 2 - 2 =$	$9 + 2 - 2 =$	$11 - 1 + 2 =$
$8 + 2 + 2 =$	$8 - 2 - 2 =$	$11 + 1 - 2 =$	$6 - 2 + 2 =$
$6 + 2 + 1 =$	$12 - 2 - 1 =$	$8 + 2 - 1 =$	$5 - 1 + 2 =$
$9 + 1 + 2 =$	$7 - 1 - 2 =$	$10 + 1 - 2 =$	$7 - 2 + 1 =$
$3 + 2 + 1 =$	$9 - 2 - 1 =$	$7 + 2 - 1 =$	$9 - 2 + 2 =$

## - 4. -

$9 + 1 =$	$7 + 4 =$	$4 + 8 =$	$11 - 1 =$	$12 - 2 =$
$9 + 3 =$	$6 + 4 =$	$4 + 7 =$	$11 - 3 =$	$12 - 3 =$
$9 + 2 =$	$6 + 5 =$	$3 + 7 =$	$11 - 5 =$	$12 - 6 =$
$8 + 2 =$	$6 + 6 =$	$3 + 8 =$	$11 - 7 =$	$12 - 4 =$
$8 + 3 =$	$5 + 5 =$	$3 + 9 =$	$11 - 9 =$	$12 - 7 =$
$8 + 4 =$	$5 + 6 =$	$2 + 8 =$	$11 - 4 =$	$12 - 5 =$
$7 + 3 =$	$5 + 7 =$	$2 + 9 =$	$11 - 2 =$	$12 - 9 =$
$7 + 5 =$	$4 + 6 =$	$1 + 9 =$	$11 - 8 =$	$12 - 8 =$

## - 5. -

$3 \times 4 =$	$2 \times 2 =$	$2 \times 6 =$	$4 \times 3 =$	$6 = . \times 2$
$5 \times 2 =$	$7 \times 1 =$	$3 \times 2 =$	$1 \times 6 =$	$12 = . \times 3$
$2 \times 3 =$	$3 \times 3 =$	$8 \times 1 =$	$9 \times 1 =$	$8 = . \times 2$
$6 \times 2 =$	$2 \times 5 =$	$4 \times 2 =$	$1 \times 10 =$	$10 = 5 \times .$
$2 \times 4 =$	$1 \times 9 =$	$1 \times 7 =$	$3 \times 1 =$	$12 = 2 \times .$

## - 6. -

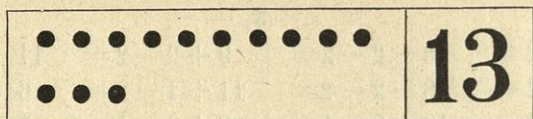
$2 \text{ in } 4 =$	$2 \text{ in } 8 =$	$2 \text{ in } 9 =$	$2 \text{ in } 10 =$	$2 \text{ in } 12 =$
$3 \text{ in } 4 =$	$3 \text{ in } 8 =$	$3 \text{ in } 9 =$	$3 \text{ in } 10 =$	$3 \text{ in } 12 =$
$2 \text{ in } 6 =$	$4 \text{ in } 8 =$	$5 \text{ in } 9 =$	$4 \text{ in } 10 =$	$4 \text{ in } 12 =$
$3 \text{ in } 6 =$	$5 \text{ in } 8 =$	$6 \text{ in } 9 =$	$5 \text{ in } 10 =$	$5 \text{ in } 12 =$
$5 \text{ in } 6 =$	$7 \text{ in } 8 =$	$8 \text{ in } 9 =$	$7 \text{ in } 10 =$	$6 \text{ in } 12 =$

## - 7. -

$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{9} \text{ v. } 9 =$	$\frac{1}{2} \text{ v. } 12 =$
$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{3} \text{ v. } 12 =$
$\frac{1}{6} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$	$\frac{1}{5} \text{ v. } 10 =$	$\frac{1}{4} \text{ v. } 12 =$
$\frac{1}{7} \text{ v. } 7 =$	$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{10} \text{ v. } 10 =$	$\frac{1}{6} \text{ v. } 12 =$

## - 8. -

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



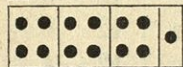
$$13 \times 1 = \quad | \quad 1 \text{ in } 13 =$$



$$6 \times 2 + 1 = \quad | \quad 2 \text{ in } 13 =$$



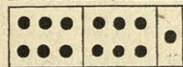
$$4 \times 3 + 1 = \quad | \quad 3 \text{ in } 13 =$$



$$3 \times 4 + 1 = \quad | \quad 4 \text{ in } 13 =$$



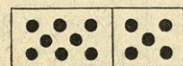
$$2 \times 5 + 3 = \quad | \quad 5 \text{ in } 13 =$$



$$2 \times 6 + 1 = \quad | \quad 6 \text{ in } 13 =$$



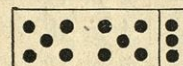
$$\begin{array}{l} 7 + 6 = \quad | \quad 13 - 6 = \quad | \quad 13 = 7 + \\ 6 + 7 = \quad | \quad 13 - 7 = \quad | \quad 13 = 6 + \\ 1 \times 7 + 6 = \quad | \quad 7 \text{ in } 13 = \end{array}$$



$$\begin{array}{l} 8 + 5 = \quad | \quad 13 - 5 = \quad | \quad 13 = 8 + \\ 5 + 8 = \quad | \quad 13 - 8 = \quad | \quad 13 = 5 + \\ 1 \times 8 + 5 = \quad | \quad 8 \text{ in } 13 = \end{array}$$



$$\begin{array}{l} 9 + 4 = \quad | \quad 13 - 4 = \quad | \quad 13 = 9 + \\ 4 + 9 = \quad | \quad 13 - 9 = \quad | \quad 13 = 4 + \\ 1 \times 9 + 4 = \quad | \quad 9 \text{ in } 13 = \end{array}$$



$$\begin{array}{l} 10 + 3 = \quad | \quad 13 - 3 = \quad | \quad 13 = 10 + \\ 3 + 10 = \quad | \quad 13 - 10 = \quad | \quad 13 = 3 + \\ 1 \times 10 + 3 = \quad | \quad 10 \text{ in } 13 = \end{array}$$

- 1. -

$1 + 3 =$	$6 + 3 =$	$4 - 3 =$	$9 - 3 =$
$2 + 3 =$	$7 + 3 =$	$5 - 3 =$	$10 - 3 =$
$3 + 3 =$	$8 + 3 =$	$6 - 3 =$	$11 - 3 =$
$4 + 3 =$	$9 + 3 =$	$7 - 3 =$	$12 - 3 =$
$5 + 3 =$	$10 + 3 =$	$8 - 3 =$	$13 - 3 =$

- 2. -

$7 + 3 =$	$2 + 3 =$	$1 + 3 =$	$4 - 3 =$	$12 - 3 =$
$4 + 3 =$	$6 + 3 =$	$8 + 3 =$	$11 - 3 =$	$9 - 3 =$
$10 + 3 =$	$9 + 3 =$	$10 - 3 =$	$8 - 3 =$	$6 - 3 =$
$3 + 3 =$	$5 + 3 =$	$7 - 3 =$	$5 - 3 =$	$13 - 3 =$

## - 3. -

$7+3+3 =$	$13-3-3 =$	$8+3-2 =$	$6+3+2+1 =$
$5+3+3 =$	$11-3-3 =$	$6+2-3 =$	$12+1-2-3 =$
$6+3+3 =$	$9-3-3 =$	$9+3-1 =$	$10-3+2+3 =$
$8+3+2 =$	$12-3-2 =$	$13-3+2 =$	$5+3+3-2 =$
$4+3+1 =$	$10-3-1 =$	$11-2+3 =$	$7+2-1+3 =$
$9+2+2 =$	$8-2-1 =$	$10-1+3 =$	$11-3+2+1 =$

## - 4. -

$9+1 =$	$7+3 =$	$5+5 =$	$11-1 =$	$12-6 =$
$9+4 =$	$7+5 =$	$5+8 =$	$11-6 =$	$13-3 =$
$9+2 =$	$7+4 =$	$5+6 =$	$11-4 =$	$13-5 =$
$9+3 =$	$7+6 =$	$4+6 =$	$11-7 =$	$13-7 =$
$8+2 =$	$6+4 =$	$4+9 =$	$12-2 =$	$13-9 =$
$8+4 =$	$6+7 =$	$4+7 =$	$12-5 =$	$13-8 =$
$8+3 =$	$6+6 =$	$3+7 =$	$12-8 =$	$13-6 =$
$8+5 =$	$6+5 =$	$3+9 =$	$12-3 =$	$13-4 =$

## - 5. -

$3 \times 2 =$	$5 \times 2 =$	$3 \times 4 =$	$2 \times 5 =$	$10 = . \times 5$
$6 \times 2 =$	$3 \times 1 =$	$2 \times 4 =$	$2 \times 6 =$	$6 = . \times 2$
$4 \times 2 =$	$3 \times 3 =$	$4 \times 1 =$	$7 \times 1 =$	$12 = 3 \times .$
$2 \times 2 =$	$3 \times 2 =$	$4 \times 3 =$	$1 \times 9 =$	$8 = 4 \times .$

## - 6. -

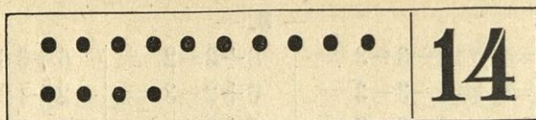
$2 \text{ in } 10 =$	$3 \text{ in } 6 =$	$4 \text{ in } 8 =$	$6 \text{ in } 6 =$
$2 \text{ in } 4 =$	$3 \text{ in } 12 =$	$4 \text{ in } 12 =$	$6 \text{ in } 12 =$
$2 \text{ in } 6 =$	$3 \text{ in } 3 =$	$5 \text{ in } 5 =$	$7 \text{ in } 11 =$
$2 \text{ in } 8 =$	$3 \text{ in } 9 =$	$5 \text{ in } 10 =$	$9 \text{ in } 12 =$

## - 7. -

$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{5} \text{ v. } 10 =$
$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{2} \text{ v. } 2 =$	$\frac{1}{4} \text{ v. } 4 =$	$\frac{1}{5} \text{ v. } 5 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{6} \text{ v. } 6 =$
$\frac{1}{2} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 3 =$	$\frac{1}{4} \text{ v. } 12 =$	$\frac{1}{6} \text{ v. } 12 =$

## - 8. -

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



$14 \times 1 = \quad | \quad 1 \text{ in } 14 =$



$7 \times 2 = \quad | \quad 2 \text{ in } 14 = \quad | \quad \frac{1}{7} \text{ v. } 14 =$



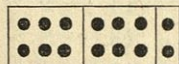
$4 \times 3 + 2 = \quad | \quad 3 \text{ in } 14 =$



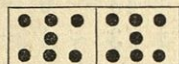
$3 \times 4 + 2 = \quad | \quad 4 \text{ in } 14 =$



$2 \times 5 + 4 = \quad | \quad 5 \text{ in } 14 =$



$2 \times 6 + 2 = \quad | \quad 6 \text{ in } 14 =$



$7 + 7 = \quad | \quad 14 - 7 = \quad | \quad 14 = 7 + .$   
 $2 \times 7 = \quad | \quad 7 \text{ in } 14 = \quad | \quad \frac{1}{2} \text{ v. } 14 =$



$8 + 6 = \quad | \quad 14 - 6 = \quad | \quad 14 = 8 + .$   
 $6 + 8 = \quad | \quad 14 - 8 = \quad | \quad 14 = 6 + .$   
 $1 \times 8 + 6 = \quad | \quad 8 \text{ in } 14 =$



$9 + 5 = \quad | \quad 14 - 5 = \quad | \quad 14 = 9 + .$   
 $5 + 9 = \quad | \quad 14 - 9 = \quad | \quad 14 = 5 + .$   
 $1 \times 9 + 5 = \quad | \quad 9 \text{ in } 14 =$



$10 + 4 = \quad | \quad 14 - 4 = \quad | \quad 14 = 10 + .$   
 $4 + 10 = \quad | \quad 14 - 10 = \quad | \quad 14 = 4 + .$   
 $1 \times 10 + 4 = \quad | \quad 10 \text{ in } 14 =$

- 1. -

$1 + 4 =$	$6 + 4 =$	$5 - 4 =$	$10 - 4 =$
$2 + 4 =$	$7 + 4 =$	$6 - 4 =$	$11 - 4 =$
$3 + 4 =$	$8 + 4 =$	$7 - 4 =$	$12 - 4 =$
$4 + 4 =$	$9 + 4 =$	$8 - 4 =$	$13 - 4 =$
$5 + 4 =$	$10 + 4 =$	$9 - 4 =$	$14 - 4 =$

- 2. -

$3 + 4 =$	$12 - 4 =$	$5 + 2 =$	$7 - 2 =$	$2 + 3 =$
$7 + 4 =$	$8 - 4 =$	$9 + 2 =$	$11 - 2 =$	$5 + 3 =$
$4 + 4 =$	$10 - 4 =$	$8 + 2 =$	$12 - 3 =$	$8 + 3 =$
$9 + 4 =$	$6 - 4 =$	$4 + 2 =$	$6 - 3 =$	$4 + 3 =$

## - 3. -

$6+4+4=$	$14-4-4=$	$9+4-3=$	$2+4+4+4=$
$3+4+4=$	$12-4-4=$	$8+4-3=$	$13-4-4-4=$
$4+4+4=$	$9-4-4=$	$10+3-4=$	$7+4+3-4=$
$7+4+3=$	$11-4-3=$	$7+4-2=$	$9+4-4+3=$
$8+4+1=$	$10-4-2=$	$13-4+3=$	$3+4-3+2=$
$10+1+3=$	$7-2-3=$	$12-4+2=$	$8+3-2+4=$
$9+2+3=$	$8-4-1=$	$11-3+4=$	$7-4-1+3=$
$2+4+1=$	$6-2-3=$	$9-2+4=$	$6+3-2+4=$

## - 4. -

$9+3=$	$6+6=$	$11-4=$	$13-5=$	$14-4=$
$9+5=$	$6+8=$	$11-6=$	$13-9=$	$14-6=$
$8+6=$	$5+6=$	$11-8=$	$13-6=$	$14-9=$
$8+4=$	$5+9=$	$12-5=$	$13-4=$	$14-8=$
$7+5=$	$4+7=$	$12-3=$	$13-8=$	$14-5=$
$7+7=$	$4+9=$	$12-9=$	$13-7=$	$14-7=$

## - 5. -

$2 \times 4 =$	$2 \times 2 =$	$3 \times 3 =$	$6 \times 1 =$	$12 = . \times 4$
$2 \times 6 =$	$2 \times 5 =$	$4 \times 3 =$	$6 \times 2 =$	$10 = . \times 2$
$2 \times 3 =$	$3 \times 4 =$	$4 \times 2 =$	$7 \times 2 =$	$14 = 2 \times .$
$2 \times 7 =$	$3 \times 2 =$	$5 \times 2 =$	$8 \times 1 =$	$9 = 3 \times .$

## - 6. -

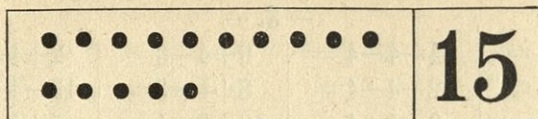
$2 \text{ in } 6 =$	$3 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 13 =$
$4 \text{ in } 12 =$	$2 \text{ in } 8 =$	$2 \text{ in } 4 =$	$3 \text{ in } 10 =$
$7 \text{ in } 14 =$	$4 \text{ in } 8 =$	$3 \text{ in } 3 =$	$4 \text{ in } 14 =$
$3 \text{ in } 9 =$	$2 \text{ in } 10 =$	$2 \text{ in } 12 =$	$5 \text{ in } 12 =$
$5 \text{ in } 10 =$	$3 \text{ in } 6 =$	$8 \text{ in } 8 =$	$6 \text{ in } 11 =$

## - 7. -

$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{2} \text{ v. } 10 =$
$\frac{1}{5} \text{ v. } 10 =$	$\frac{1}{6} \text{ v. } 12 =$	$\frac{1}{7} \text{ v. } 14 =$	$\frac{1}{4} \text{ v. } 8 =$
$\frac{1}{4} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{4} \text{ v. } 4 =$	$\frac{1}{6} \text{ v. } 6 =$
$\frac{1}{2} \text{ v. } 14 =$	$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{2} \text{ v. } 12 =$

## - 8. -

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



$$15 \times 1 = \quad | \quad 1 \text{ in } 15 =$$



$$7 \times 2 + 1 = \quad | \quad 2 \text{ in } 15 =$$



$$5 \times 3 = \quad | \quad 3 \text{ in } 15 = \quad | \quad \frac{1}{5} \text{ v. } 15 =$$



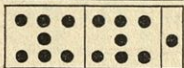
$$3 \times 4 + 3 = \quad | \quad 4 \text{ in } 15 =$$



$$3 \times 5 = \quad | \quad 5 \text{ in } 15 = \quad | \quad \frac{1}{3} \text{ v. } 15 =$$



$$2 \times 6 + 3 = \quad | \quad 6 \text{ in } 15 =$$



$$2 \times 7 + 1 = \quad | \quad 7 \text{ in } 15 =$$



$$\begin{array}{l} 8 + 7 = \quad | \quad 15 - 7 = \quad | \quad 15 = 8 + \\ 7 + 8 = \quad | \quad 15 - 8 = \quad | \quad 15 = 7 + \\ 1 \times 8 + 7 = \quad | \quad 8 \text{ in } 15 = \end{array}$$



$$\begin{array}{l} 9 + 6 = \quad | \quad 15 - 6 = \quad | \quad 15 = 9 + \\ 6 + 9 = \quad | \quad 15 - 9 = \quad | \quad 15 = 6 + \\ 1 \times 9 + 6 = \quad | \quad 9 \text{ in } 15 = \end{array}$$



$$\begin{array}{l} 10 + 5 = \quad | \quad 15 - 10 = \quad | \quad 15 = 10 + \\ 5 + 10 = \quad | \quad 15 - 5 = \quad | \quad 15 = 5 + \\ 1 \times 10 + 5 = \quad | \quad 10 \text{ in } 15 = \end{array}$$

- 1. -

$1 + 5 =$	$6 + 5 =$	$6 - 5 =$	$11 - 5 =$
$2 + 5 =$	$7 + 5 =$	$7 - 5 =$	$12 - 5 =$
$3 + 5 =$	$8 + 5 =$	$8 - 5 =$	$13 - 5 =$
$4 + 5 =$	$9 + 5 =$	$9 - 5 =$	$14 - 5 =$
$5 + 5 =$	$10 + 5 =$	$10 - 5 =$	$15 - 5 =$

- 2. -

$7 + 5 =$	$3 + 5 =$	$11 - 5 =$	$7 + 4 =$	$5 + 3 =$
$2 + 5 =$	$8 + 5 =$	$6 - 5 =$	$7 - 4 =$	$5 - 3 =$
$9 + 5 =$	$14 - 5 =$	$13 - 5 =$	$10 + 4 =$	$9 + 3 =$
$4 + 5 =$	$9 - 5 =$	$7 - 5 =$	$10 - 4 =$	$9 - 3 =$



## - 3. -

$12 + 3 =$	$11 + 2 =$	$15 - 4 =$	$13 - 1 =$
$2 + 3 = 5$	$11 + 4 =$	$5 - 4 = 1$	$14 - 2 =$
$10 + 5 = 15$	$12 + 2 =$	$10 + 1 = 11$	$14 - 3 =$
$12 + 3 = 15$	$13 + 2 =$	$15 - 4 = 11$	$15 - 1 =$
	$14 + 1 =$		$15 - 3 =$

## - 4. -

$5+5+5 =$	$14-5-5 =$	$9+5-4 =$	$2+3+4+5 =$
$2+5+5 =$	$11-5-5 =$	$11+4-5 =$	$15-3-5-4 =$
$4+5+5 =$	$13-5-5 =$	$3+5-2 =$	$12+3-4-5 =$
$7+5+3 =$	$12-5-4 =$	$8-5+4 =$	$13+1-5+3 =$
$8+5+2 =$	$10-5-3 =$	$13-4+5 =$	$3+5+4-2 =$
$4+6+5 =$	$8-5-2 =$	$10-3+4 =$	$7-2+5-3 =$

## - 5. -

$9 + 4 =$	$7 + 8 =$	$11 - 6 =$	$13 - 7 =$	$15 - 8 =$
$9 + 6 =$	$7 + 7 =$	$11 - 8 =$	$13 - 9 =$	$15 - 7 =$
$8 + 7 =$	$6 + 6 =$	$12 - 9 =$	$14 - 8 =$	$15 - 9 =$
$8 + 5 =$	$6 + 9 =$	$12 - 7 =$	$14 - 6 =$	$15 - 6 =$

## - 6. -

$2 \times 4 =$	$3 \times 2 =$	$5 \times 3 =$	$7 \times 2 =$	$15 = . \times 3$
$3 \times 5 =$	$2 \times 6 =$	$2 \times 7 =$	$4 \times 3 =$	$12 = . \times 4$
$4 \times 2 =$	$3 \times 4 =$	$5 \times 2 =$	$6 \times 2 =$	$10 = 2 \times .$
$2 \times 5 =$	$2 \times 2 =$	$3 \times 3 =$	$2 \times 3 =$	$15 = 5 \times .$

## - 7. -

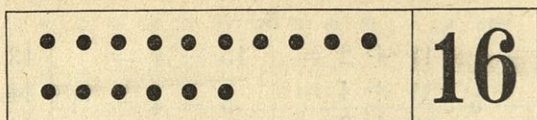
$2 \text{ in } 8 =$	$2 \text{ in } 10 =$	$2 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 15 =$
$3 \text{ in } 8 =$	$3 \text{ in } 10 =$	$3 \text{ in } 12 =$	$3 \text{ in } 14 =$	$3 \text{ in } 15 =$
$4 \text{ in } 8 =$	$4 \text{ in } 10 =$	$4 \text{ in } 12 =$	$5 \text{ in } 14 =$	$4 \text{ in } 15 =$
$5 \text{ in } 8 =$	$5 \text{ in } 10 =$	$6 \text{ in } 12 =$	$7 \text{ in } 14 =$	$5 \text{ in } 15 =$

## - 8. -

$1/2 \text{ v. } 12 =$	$1/5 \text{ v. } 10 =$	$1/8 \text{ v. } 8 =$	$1/3 \text{ v. } 3 =$
$1/3 \text{ v. } 6 =$	$1/4 \text{ v. } 8 =$	$1/5 \text{ v. } 15 =$	$1/7 \text{ v. } 14 =$
$1/2 \text{ v. } 4 =$	$1/2 \text{ v. } 8 =$	$1/2 \text{ v. } 10 =$	$1/3 \text{ v. } 9 =$
$1/3 \text{ v. } 12 =$	$1/3 \text{ v. } 15 =$	$1/2 \text{ v. } 14 =$	$1/4 \text{ v. } 12 =$

## - 9. -

$5 \times 2 + 5 =$	$3 \times 5 - 4 =$	$3 \times 3 + 6 =$
$2 \times 6 - 3 =$	$4 \times 3 + 3 =$	$6 \times 2 - 5 =$
$7 \times 2 + 1 =$	$2 \times 7 - 5 =$	$2 \times 5 + 4 =$



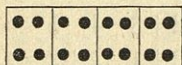
$$16 \times 1 = \quad | \quad 1 \text{ in } 16 =$$



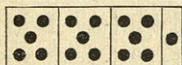
$$8 \times 2 = \quad | \quad 2 \text{ in } 16 = \quad | \quad \frac{1}{8} \text{ v. } 16 =$$



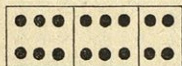
$$5 \times 3 + 1 = \quad | \quad 3 \text{ in } 16 =$$



$$4 \times 4 = \quad | \quad 4 \text{ in } 16 = \quad | \quad \frac{1}{4} \text{ v. } 16 =$$



$$3 \times 5 + 1 = \quad | \quad 5 \text{ in } 16 =$$



$$2 \times 6 + 4 = \quad | \quad 6 \text{ in } 16 =$$



$$2 \times 7 + 2 = \quad | \quad 7 \text{ in } 16 =$$



$$8 + 8 = \quad | \quad 16 - 8 = \quad | \quad 16 = 8 +$$

$$2 \times 8 = \quad | \quad 8 \text{ in } 16 = \quad | \quad \frac{1}{2} \text{ v. } 16 =$$



$$9 + 7 = \quad | \quad 16 - 7 = \quad | \quad 16 = 9 +$$

$$7 + 9 = \quad | \quad 16 - 9 = \quad | \quad 16 = 7 +$$

$$1 \times 9 + 7 = \quad | \quad 9 \text{ in } 16 =$$



$$10 + 6 = \quad | \quad 16 - 6 = \quad | \quad 16 = 10 +$$

$$6 + 10 = \quad | \quad 16 - 10 = \quad | \quad 16 = 6 +$$

$$1 \times 10 + 6 = \quad | \quad 10 \text{ in } 16 =$$

- 1. -

$$1 + 6 = \quad | \quad 6 + 6 = \quad | \quad 7 - 6 = \quad | \quad 12 - 6 =$$

$$2 + 6 = \quad | \quad 7 + 6 = \quad | \quad 8 - 6 = \quad | \quad 13 - 6 =$$

$$3 + 6 = \quad | \quad 8 + 6 = \quad | \quad 9 - 6 = \quad | \quad 14 - 6 =$$

$$4 + 6 = \quad | \quad 9 + 6 = \quad | \quad 10 - 6 = \quad | \quad 15 - 6 =$$

$$5 + 6 = \quad | \quad 10 + 6 = \quad | \quad 11 - 6 = \quad | \quad 16 - 6 =$$

- 2. -

$$4 + 6 = \quad | \quad 12 - 6 = \quad | \quad 12 + 1 = \quad | \quad 13 + 3 = \quad | \quad 12 + 4 =$$

$$7 + 6 = \quad | \quad 15 - 6 = \quad | \quad 12 - 1 = \quad | \quad 13 - 3 = \quad | \quad 11 + 5 =$$

$$8 + 6 = \quad | \quad 9 - 6 = \quad | \quad 14 + 2 = \quad | \quad 11 + 4 = \quad | \quad 14 - 3 =$$

$$3 + 6 = \quad | \quad 13 - 6 = \quad | \quad 14 - 2 = \quad | \quad 15 - 4 = \quad | \quad 15 - 2 =$$

$$5 + 6 = \quad | \quad 10 - 6 = \quad | \quad 16 - 2 = \quad | \quad 16 - 4 = \quad | \quad 16 - 3 =$$

## - 3. -

$4+6+6 =$	$15-6-6 =$	$9+6-4 =$	$4+4+4+4 =$
$1+6+6 =$	$12-6-6 =$	$11+5-6 =$	$15-6-6-2 =$
$3+6+6 =$	$9-6-2 =$	$13+2-6 =$	$9+6-4+5 =$
$7+6+2 =$	$11-6-4 =$	$15-6+5 =$	$3+6+6-4 =$
$8+1+6 =$	$16-3-6 =$	$12-4+6 =$	$12-6+3+6 =$
$5+6+5 =$	$13-6-5 =$	$10-6+3 =$	$16-6-2+5 =$

## - 4. -

$9+5 =$	$6+7 =$	$9+ . = 10$	$6+ . = 10$	$11-5 =$
$9+7 =$	$6+9 =$	$9+ . = 12$	$6+ . = 15$	$12-7 =$
$8+6 =$	$5+6 =$	$9+ . = 16$	$5+ . = 10$	$13-9 =$
$8+8 =$	$5+8 =$	$8+ . = 10$	$5+ . = 12$	$14-8 =$
$8+4 =$	$4+7 =$	$8+ . = 16$	$4+ . = 10$	$15-6 =$
$7+7 =$	$4+9 =$	$8+ . = 12$	$4+ . = 13$	$16-7 =$
$7+5 =$	$3+9 =$	$7+ . = 10$	$3+ . = 11$	$16-9 =$
$7+9 =$	$3+8 =$	$7+ . = 16$	$2+ . = 10$	$16-8 =$

## - 5. -

$2 \times 7 =$	$8 \times 2 =$	$5 \times 2 =$	$2 \times 8 =$	$16 = 2 \times .$
$3 \times 4 =$	$2 \times 3 =$	$2 \times 4 =$	$3 \times 3 =$	$14 = 7 \times .$
$4 \times 4 =$	$2 \times 5 =$	$7 \times 2 =$	$4 \times 2 =$	$12 = . \times 3$
$5 \times 3 =$	$4 \times 3 =$	$3 \times 5 =$	$2 \times 6 =$	$16 = . \times 4$

## - 6. -

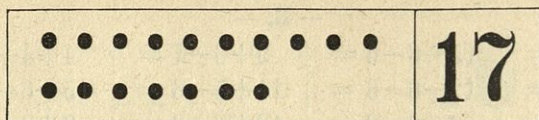
$2 \text{ in } 14 =$	$3 \text{ in } 12 =$	$4 \text{ in } 16 =$	$3 \text{ in } 11 =$	$2 \text{ in } 7 =$
$8 \text{ in } 16 =$	$2 \text{ in } 6 =$	$5 \text{ in } 10 =$	$5 \text{ in } 13 =$	$4 \text{ in } 13 =$
$5 \text{ in } 10 =$	$6 \text{ in } 12 =$	$3 \text{ in } 15 =$	$6 \text{ in } 16 =$	$6 \text{ in } 15 =$
$2 \text{ in } 16 =$	$3 \text{ in } 9 =$	$2 \text{ in } 8 =$	$9 \text{ in } 14 =$	$8 \text{ in } 12 =$

## - 7. -

$\frac{1}{8} \text{ v. } 16 =$	$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{2} \text{ v. } 16 =$	$\frac{1}{2} \text{ v. } 14 =$
$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{4} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{3} \text{ v. } 12 =$
$\frac{1}{5} \text{ v. } 10 =$	$\frac{1}{5} \text{ v. } 15 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{4} \text{ v. } 16 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{7} \text{ v. } 14 =$	$\frac{1}{2} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 15 =$

## - 8. -

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



$$17 \times 1 = \quad | \quad 1 \text{ in } 17 =$$



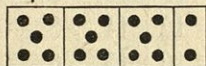
$$8 \times 2 + 1 = \quad | \quad 2 \text{ in } 17 =$$



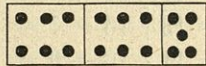
$$5 \times 3 + 2 = \quad | \quad 3 \text{ in } 17 =$$



$$4 \times 4 + 1 = \quad | \quad 4 \text{ in } 17 =$$



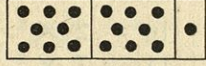
$$3 \times 5 + 2 = \quad | \quad 5 \text{ in } 17 =$$



$$2 \times 6 + 5 = \quad | \quad 6 \text{ in } 17 =$$



$$2 \times 7 + 3 = \quad | \quad 7 \text{ in } 17 =$$



$$2 \times 8 + 1 = \quad | \quad 8 \text{ in } 17 =$$



$$\begin{array}{l} 9 + 8 = \quad | \quad 17 - 8 = \quad | \quad 17 = 9 + . \\ 8 + 9 = \quad | \quad 17 - 9 = \quad | \quad 17 = 8 + . \\ 1 \times 9 + 8 = \quad | \quad 9 \text{ in } 17 = \end{array}$$



$$\begin{array}{l} 10 + 7 = \quad | \quad 17 - 7 = \quad | \quad 17 = 10 + . \\ 7 + 10 = \quad | \quad 17 - 10 = \quad | \quad 17 = 7 + . \\ 1 \times 10 + 7 = \quad | \quad 10 \text{ in } 17 = \end{array}$$

- 1. -

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

- 2. -

$9 + 7 =$	$11 - 7 =$	$5 + 3 =$	$17 - 4 =$	$12 + 5 =$
$3 + 7 =$	$16 - 7 =$	$8 + 3 =$	$13 - 4 =$	$9 + 5 =$
$7 + 7 =$	$9 - 7 =$	$11 + 3 =$	$9 - 4 =$	$17 - 6 =$
$2 + 7 =$	$12 - 7 =$	$14 + 3 =$	$5 - 4 =$	$11 - 6 =$
$6 + 7 =$	$15 - 7 =$	$10 + 7 =$	$17 - 5 =$	$17 - 7 =$

## - 3. -

$3+7+7 =$	$17-7-7 =$	$8+7-6 =$	$2+4+7+4 =$
$1+7+7 =$	$15-7-7 =$	$11+5-7 =$	$17-3-5-7 =$
$5+7+4 =$	$16-7-6 =$	$9+7-4 =$	$8+7-2-6 =$
$8+2+7 =$	$12-4-7 =$	$17-6+5 =$	$12+5-7+4 =$
$4+7+6 =$	$14-7-5 =$	$16-7+6 =$	$16-7+6-7 =$
$6+5+4 =$	$13-3-7 =$	$13-4+7 =$	$15-7+5-6 =$

## - 4. -

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

## - 5. -

$3 \times 5 =$	$5 \times 2 =$	$7 \times 2 =$	$8 = \cdot \times 4$	$15 = 3 \times .$
$4 \times 4 =$	$2 \times 8 =$	$2 \times 3 =$	$12 = \cdot \times 3$	$10 = 5 \times .$
$2 \times 7 =$	$5 \times 3 =$	$4 \times 2 =$	$14 = \cdot \times 2$	$16 = 4 \times .$
$3 \times 3 =$	$2 \times 6 =$	$8 \times 2 =$	$16 = \cdot \times 8$	$12 = 3 \times .$

## - 6. -

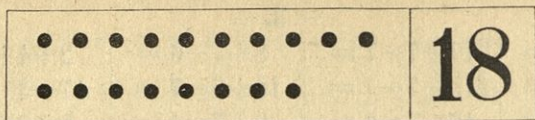
$2 \text{ in } 16 =$	$2 \text{ in } 14 =$	$3 \text{ in } 12 =$	$5 \text{ in } 10 =$	$3 \text{ in } 17 =$
$2 \text{ in } 6 =$	$2 \text{ in } 4 =$	$4 \text{ in } 8 =$	$6 \text{ in } 12 =$	$4 \text{ in } 13 =$
$2 \text{ in } 12 =$	$3 \text{ in } 9 =$	$4 \text{ in } 16 =$	$7 \text{ in } 14 =$	$6 \text{ in } 10 =$
$2 \text{ in } 8 =$	$3 \text{ in } 15 =$	$4 \text{ in } 12 =$	$8 \text{ in } 16 =$	$8 \text{ in } 17 =$
$2 \text{ in } 10 =$	$3 \text{ in } 6 =$	$5 \text{ in } 15 =$	$9 \text{ in } 9 =$	$9 \text{ in } 16 =$

## - 7. -


$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{9} \text{ v. } 9 =$
$\frac{1}{3} \text{ v. } 15 =$	$\frac{1}{8} \text{ v. } 8 =$	$\frac{1}{7} \text{ v. } 7 =$	$\frac{1}{3} \text{ v. } 3 =$
$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{2} \text{ v. } 12 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{5} \text{ v. } 15 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{5} \text{ v. } 10 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{2} \text{ v. } 14 =$


## - 8. -


$3 \times 2 + 8 =$	$2 \times 7 - 3 =$	$4 \times 2 + 5 =$
$6 \times 2 + 5 =$	$4 \times 4 - 5 =$	$2 \times 3 + 7 =$
$3 \times 3 + 7 =$	$8 \times 2 - 7 =$	$7 \times 2 - 4 =$
$2 \times 5 + 6 =$	$4 \times 3 - 6 =$	$3 \times 5 - 6 =$





$$18 \times 1 = \quad | \quad 1 \text{ in } 18 =$$

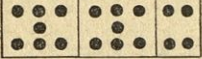
	$9 \times 2 =$	$2 \text{ in } 18 =$	$\frac{1}{9} \text{ v. } 18 =$
---	----------------	----------------------	--------------------------------


	$6 \times 3 =$	$3 \text{ in } 18 =$	$\frac{1}{6} \text{ v. } 18 =$
---	----------------	----------------------	--------------------------------


	$4 \times 4 + 2 =$	$4 \text{ in } 18 =$	
---	--------------------	----------------------	--


	$3 \times 5 + 3 =$	$5 \text{ in } 18 =$	
---	--------------------	----------------------	--

	$3 \times 6 =$	$6 \text{ in } 18 =$	$\frac{1}{3} \text{ v. } 18 =$
---	----------------	----------------------	--------------------------------

	$2 \times 7 + 4 =$	$7 \text{ in } 18 =$	
---	--------------------	----------------------	--

	$2 \times 8 + 2 =$	$8 \text{ in } 18 =$	
---	--------------------	----------------------	--

	$9 + 9 =$	$18 - 9 =$	$18 = 9 +$
	$2 \times 9 =$	$9 \text{ in } 18 =$	$\frac{1}{2} \text{ v. } 18 =$

	$10 + 8 =$	$18 - 8 =$	$18 = 10 +$
	$8 + 10 =$	$18 - 10 =$	$18 = 8 +$
	$1 \times 10 + 8 =$	$10 \text{ in } 18 =$	

- 1. -

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

- 2. -

$3 + 8 =$	$10 - 8 =$	$13 + 5 =$	$12 - 6 =$	$11 + 7 =$
$8 + 8 =$	$17 - 8 =$	$13 - 5 =$	$12 + 6 =$	$11 - 7 =$
$4 + 8 =$	$9 - 8 =$	$11 + 5 =$	$9 - 6 =$	$8 + 7 =$
$5 + 8 =$	$13 - 8 =$	$11 - 5 =$	$9 + 6 =$	$8 - 7 =$
$9 + 8 =$	$16 - 8 =$	$6 + 8 =$	$15 - 8 =$	$2 + 8 =$

## - 3. -

$2 + 8 + 8 =$	$5 + 4 + 8 + 1 =$	$7 + 8 + 3 - 6 =$
$5 + 8 + 4 =$	$2 + 3 + 5 + 8 =$	$9 + 2 + 5 - 8 =$
$7 + 8 + 3 =$	$1 + 8 + 4 + 3 =$	$12 + 5 - 8 - 4 =$
$16 - 8 - 6 =$	$17 - 8 - 2 - 5 =$	$8 + 8 - 7 + 3 =$
$18 - 8 - 5 =$	$18 - 4 - 3 - 8 =$	$16 - 8 + 6 - 8 =$
$15 - 4 - 8 =$	$16 - 5 - 8 - 2 =$	$18 - 7 - 8 + 6 =$

## - 4. -

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

## - 5. -

$3 \times 4 =$	$2 \times 9 =$	$6 \times 3 =$	$4 \times 3 =$	$14 = . \times 7$
$2 \times 7 =$	$3 \times 5 =$	$7 \times 2 =$	$9 \times 2 =$	$15 = . \times 3$
$3 \times 6 =$	$2 \times 8 =$	$5 \times 3 =$	$2 \times 6 =$	$16 = 2 \times .$
$4 \times 4 =$	$3 \times 3 =$	$8 \times 2 =$	$5 \times 2 =$	$18 = 6 \times .$

## - 6. -

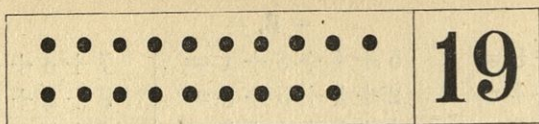
$2 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 16 =$	$2 \text{ in } 18 =$	$3 \text{ in } 10 =$
$3 \text{ in } 12 =$	$7 \text{ in } 14 =$	$4 \text{ in } 16 =$	$3 \text{ in } 18 =$	$4 \text{ in } 14 =$
$4 \text{ in } 12 =$	$3 \text{ in } 15 =$	$8 \text{ in } 16 =$	$6 \text{ in } 18 =$	$5 \text{ in } 13 =$
$6 \text{ in } 12 =$	$5 \text{ in } 15 =$	$5 \text{ in } 10 =$	$9 \text{ in } 18 =$	$6 \text{ in } 16 =$

## - 7. -

$1/6 \text{ v. } 12 =$	$1/8 \text{ v. } 16 =$	$1/4 \text{ v. } 16 =$	$1/5 \text{ v. } 10 =$
$1/2 \text{ v. } 10 =$	$1/5 \text{ v. } 15 =$	$1/3 \text{ v. } 18 =$	$1/2 \text{ v. } 12 =$
$1/4 \text{ v. } 8 =$	$1/7 \text{ v. } 14 =$	$1/2 \text{ v. } 14 =$	$1/9 \text{ v. } 18 =$
$1/3 \text{ v. } 6 =$	$1/6 \text{ v. } 18 =$	$1/3 \text{ v. } 12 =$	$1/4 \text{ v. } 12 =$

## - 8. -

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



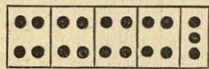
$19 \times 1 = \quad | \quad 1 \text{ in } 19 =$



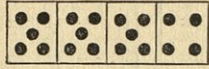
$9 \times 2 + 1 = \quad | \quad 2 \text{ in } 19 =$



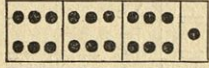
$6 \times 3 + 1 = \quad | \quad 3 \text{ in } 19 =$



$4 \times 4 + 3 = \quad | \quad 4 \text{ in } 19 =$



$3 \times 5 + 4 = \quad | \quad 5 \text{ in } 19 =$



$3 \times 6 + 1 = \quad | \quad 6 \text{ in } 19 =$



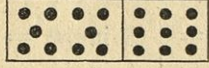
$2 \times 7 + 5 = \quad | \quad 7 \text{ in } 19 =$



$2 \times 8 + 3 = \quad | \quad 8 \text{ in } 19 =$



$2 \times 9 + 1 = \quad | \quad 9 \text{ in } 19 =$



$$\begin{array}{l}
 10 + 9 = \quad | \quad 19 - 9 = \quad | \quad 19 = 10 + \quad . \\
 9 + 10 = \quad | \quad 19 - 10 = \quad | \quad 19 = 9 + \quad . \\
 1 \times 10 + 9 = \quad | \quad 10 \text{ in } 19 =
 \end{array}$$

- 1. -

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

- 2. -

$3 + 9 =$	$7 + 9 =$	$15 - 9 =$	$11 + 8 =$	$6 + 7 =$
$8 + 9 =$	$4 + 9 =$	$11 - 9 =$	$5 + 8 =$	$12 + 7 =$
$6 + 9 =$	$1 + 9 =$	$18 - 9 =$	$9 + 8 =$	$16 - 7 =$
$2 + 9 =$	$13 - 9 =$	$12 - 9 =$	$13 - 8 =$	$11 - 7 =$
$5 + 9 =$	$17 - 9 =$	$16 - 9 =$	$16 - 8 =$	$9 - 7 =$



## - 3. -

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

## - 4. -

$6 + 3 + 9 =$	$2 + 3 + 9 + 4 =$	$17 - 9 + 6 - 8 =$
$8 + 5 + 6 =$	$5 + 6 + 4 + 4 =$	$15 - 8 - 3 + 9 =$
$3 + 4 + 7 =$	$4 + 2 + 3 + 7 =$	$14 - 7 + 5 + 4 =$
$18 - 7 - 8 =$	$18 - 4 - 3 - 9 =$	$6 + 9 - 8 + 6 =$
$19 - 9 - 7 =$	$19 - 7 - 2 - 3 =$	$8 + 7 - 6 - 9 =$
$9 + 9 - 8 =$	$6 + 7 - 5 + 9 =$	$16 - 9 + 6 - 5 =$
$12 + 5 - 9 =$	$8 + 6 - 9 - 3 =$	$12 - 4 + 7 + 3 =$
$17 - 6 + 8 =$	$16 - 8 + 9 - 5 =$	$19 - 8 - 4 + 9 =$

## - 5. -

$2 \times 2 =$	$6 \times 3 =$	$2 \times 7 =$	$8 \times 2 =$	$6 = 2 \times .$
$3 \times 3 =$	$7 \times 2 =$	$3 \times 6 =$	$2 \times 9 =$	$15 = 3 \times .$
$4 \times 4 =$	$5 \times 3 =$	$4 \times 3 =$	$6 \times 2 =$	$12 = . \times 4$
$5 \times 2 =$	$9 \times 2 =$	$2 \times 5 =$	$2 \times 4 =$	$16 = . \times 8$

## - 6. -

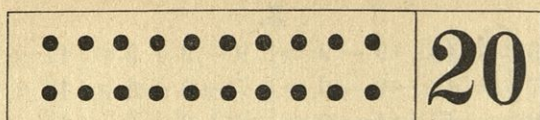
$2 \text{ in } 16 =$	$3 \text{ in } 12 =$	$4 \text{ in } 16 =$	$5 \text{ in } 15 =$	$7 \text{ in } 10 =$
$2 \text{ in } 10 =$	$3 \text{ in } 9 =$	$4 \text{ in } 8 =$	$5 \text{ in } 19 =$	$8 \text{ in } 16 =$
$2 \text{ in } 4 =$	$3 \text{ in } 18 =$	$4 \text{ in } 12 =$	$6 \text{ in } 18 =$	$8 \text{ in } 19 =$
$2 \text{ in } 19 =$	$3 \text{ in } 19 =$	$4 \text{ in } 19 =$	$6 \text{ in } 19 =$	$9 \text{ in } 18 =$

## - 7. -

$\frac{1}{5} \text{ v. } 15 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{9} \text{ v. } 18 =$	$\frac{1}{2} \text{ v. } 10 =$
$\frac{1}{4} \text{ v. } 16 =$	$\frac{1}{6} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 15 =$	$\frac{1}{4} \text{ v. } 12 =$
$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{2} \text{ v. } 18 =$	$\frac{1}{7} \text{ v. } 14 =$	$\frac{1}{3} \text{ v. } 18 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{8} \text{ v. } 16 =$	$\frac{1}{6} \text{ v. } 18 =$	$\frac{1}{2} \text{ v. } 14 =$

## - 8. -

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



$$20 \times 1 = \quad | \quad 1 \text{ in } 20 =$$



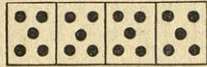
$$10 \times 2 = \quad | \quad 2 \text{ in } 20 = \quad | \quad \frac{1}{10} \text{ v. } 20 =$$



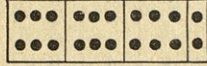
$$6 \times 3 + 2 = \quad | \quad 3 \text{ in } 20 =$$



$$5 \times 4 = \quad | \quad 4 \text{ in } 20 = \quad | \quad \frac{1}{5} \text{ v. } 20 =$$



$$4 \times 5 = \quad | \quad 5 \text{ in } 20 = \quad | \quad \frac{1}{4} \text{ v. } 20 =$$



$$3 \times 6 + 2 = \quad | \quad 6 \text{ in } 20 =$$



$$2 \times 7 + 6 = \quad | \quad 7 \text{ in } 20 =$$



$$2 \times 8 + 4 = \quad | \quad 8 \text{ in } 20 =$$



$$2 \times 9 + 2 = \quad | \quad 9 \text{ in } 20 =$$



$$10 + 10 = \quad | \quad 20 - 10 = \quad | \quad 20 = 10 + .$$

$$2 \times 10 = \quad | \quad 10 \text{ in } 20 = \quad | \quad \frac{1}{2} \text{ v. } 20 =$$

— 1. —

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

— 2. —

$2 + 1 =$	$4 + 6 =$	$10 + 10 =$	$6 + 3 =$	$4 + 7 =$
$3 - 2 =$	$10 - 3 =$	$20 - 7 =$	$9 - 4 =$	$11 - 8 =$
$1 + 4 =$	$7 + 8 =$	$13 + 2 =$	$5 + 5 =$	$3 + 9 =$
$5 - 1 =$	$15 - 5 =$	$15 - 9 =$	$10 - 6 =$	$12 - 10 =$

## - 3. -

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

## - 4. -

$6 + 7 + 5 =$	$19 - 7 - 8 =$	$7 + 10 - 9 =$
$4 + 8 + 7 =$	$17 - 6 - 6 =$	$18 - 10 + 7 =$
$9 + 5 + 6 =$	$20 - 5 + 4 =$	$19 - 5 - 10 =$
$3 + 8 + 9 =$	$16 - 9 + 7 =$	$16 - 9 + 10 =$
$7 + 9 + 4 =$	$13 - 8 + 6 =$	$8 + 8 - 9 =$
$5 + 6 + 7 =$	$9 + 9 - 7 =$	$15 + 4 - 10 =$
$4 + 7 + 7 =$	$5 + 8 - 6 =$	$17 - 8 - 7 =$
$8 + 6 + 4 =$	$7 + 9 - 8 =$	$9 + 10 - 8 =$

## - 5. -

$12 + 2 + 2 + 2 =$	$2 + 5 + 5 + 5 =$	$4 + 7 + 7 + 2 =$
$15 - 2 - 2 - 2 =$	$5 + 5 + 5 + 5 =$	$1 + 7 + 7 + 4 =$
$8 + 3 + 3 + 3 =$	$19 - 5 - 5 - 5 =$	$18 - 7 - 7 - 3 =$
$13 - 3 - 3 - 3 =$	$16 - 5 - 5 - 5 =$	$19 - 7 - 7 - 5 =$
$4 + 4 + 4 + 4 =$	$1 + 6 + 6 + 6 =$	$3 + 8 + 8 + 1 =$
$1 + 4 + 4 + 4 =$	$2 + 6 + 6 + 6 =$	$20 - 8 - 8 - 2 =$
$18 - 4 - 4 - 4 =$	$19 - 6 - 6 - 6 =$	$1 + 9 + 9 + 1 =$
$15 - 4 - 4 - 4 =$	$17 - 6 - 6 - 3 =$	$17 - 9 - 5 - 1 =$

## - 6. -

$4 + 3 + 10 + 2 =$	$16 - 4 - 5 + 10 =$	$6 + 4 + 7 + 2 =$
$19 - 7 - 4 - 5 =$	$7 + 9 - 4 + 6 =$	$5 + 2 + 8 + 5 =$
$17 - 5 + 3 - 7 =$	$13 + 7 - 9 - 8 =$	$20 - 5 - 7 - 6 =$
$14 - 2 - 6 + 9 =$	$15 - 6 + 10 - 7 =$	$18 - 3 - 6 - 9 =$
$6 + 9 - 7 + 8 =$	$20 - 8 + 6 - 5 =$	$8 + 9 - 6 + 8 =$
$9 + 9 - 5 - 6 =$	$6 + 8 - 9 + 6 =$	$19 - 9 + 8 - 6 =$
$19 - 5 + 3 - 9 =$	$17 - 5 - 10 + 9 =$	$20 - 8 - 5 + 9 =$
$18 - 9 + 8 - 4 =$	$12 + 8 - 9 - 9 =$	$9 + 7 - 4 + 8 =$

## - 7. -

$2 \times 3 =$	$1 \times 2 =$	$3 \times 3 =$	$6 = . \times 3$	$4 = 2 \times .$
$2 \times 2 =$	$6 \times 2 =$	$3 \times 5 =$	$8 = . \times 2$	$10 = 2 \times .$
$2 \times 5 =$	$3 \times 2 =$	$3 \times 4 =$	$8 = . \times 4$	$10 = 5 \times .$
$2 \times 1 =$	$9 \times 2 =$	$3 \times 6 =$	$9 = . \times 3$	$12 = 3 \times .$
$2 \times 8 =$	$5 \times 2 =$	$4 \times 4 =$	$15 = . \times 3$	$12 = 6 \times .$
$2 \times 6 =$	$2 \times 2 =$	$4 \times 5 =$	$15 = . \times 5$	$14 = 7 \times .$
$2 \times 9 =$	$10 \times 2 =$	$4 \times 3 =$	$20 = . \times 2$	$16 = 4 \times .$
$2 \times 4 =$	$4 \times 2 =$	$5 \times 3 =$	$20 = . \times 4$	$16 = 8 \times .$
$2 \times 7 =$	$8 \times 2 =$	$5 \times 4 =$	$20 = . \times 5$	$18 = 3 \times .$
$2 \times 10 =$	$7 \times 2 =$	$6 \times 3 =$	$20 = . \times 10$	$18 = 9 \times .$

## - 8. -

2 in 6 =	2 in 20 =	3 in 18 =	5 in 20 =	8 in 8 =
2 in 10 =	2 in 16 =	3 in 9 =	5 in 15 =	8 in 16 =
2 in 18 =	2 in 8 =	4 in 12 =	5 in 10 =	9 in 18 =
2 in 4 =	3 in 15 =	4 in 20 =	6 in 18 =	9 in 9 =
2 in 14 =	3 in 6 =	4 in 16 =	6 in 12 =	10 in 10 =
2 in 12 =	3 in 12 =	4 in 8 =	7 in 14 =	10 in 20 =

## - 9. -

$\frac{1}{2}$ v. 4 =	$\frac{1}{2}$ v. 8 =	$\frac{1}{3}$ v. 15 =	$\frac{1}{4}$ v. 12 =
$\frac{1}{2}$ v. 12 =	$\frac{1}{2}$ v. 14 =	$\frac{1}{3}$ v. 6 =	$\frac{1}{5}$ v. 10 =
$\frac{1}{2}$ v. 18 =	$\frac{1}{2}$ v. 20 =	$\frac{1}{4}$ v. 20 =	$\frac{1}{5}$ v. 15 =
$\frac{1}{2}$ v. 6 =	$\frac{1}{3}$ v. 12 =	$\frac{1}{4}$ v. 4 =	$\frac{1}{5}$ v. 20 =
$\frac{1}{2}$ v. 10 =	$\frac{1}{3}$ v. 18 =	$\frac{1}{4}$ v. 16 =	$\frac{1}{6}$ v. 12 =
$\frac{1}{2}$ v. 16 =	$\frac{1}{3}$ v. 9 =	$\frac{1}{4}$ v. 8 =	$\frac{1}{6}$ v. 18 =

## - 10. -

$4 \times 4 + 4 =$	$5 \times 3 + 5 =$	$\frac{1}{2}$ v. 18 + 9 =
$5 \times 2 + 8 =$	$7 \times 2 + 4 =$	$\frac{1}{3}$ v. 6 + 8 =
$2 \times 3 + 9 =$	$2 \times 4 + 7 =$	$\frac{1}{5}$ v. 15 + 7 =
$3 \times 4 - 9 =$	$2 \times 8 - 10 =$	$\frac{1}{6}$ v. 18 - 2 =
$2 \times 6 - 5 =$	$3 \times 6 - 3 =$	$\frac{1}{4}$ v. 20 - 3 =
$10 \times 2 - 7 =$	$4 \times 5 - 8 =$	$\frac{1}{3}$ v. 12 - 4 =

## Zweite Abtheilung.

### I. Zahlenraum von eins bis hundert.

#### A. Erweiterung des Zahlenraumes bis 100.

1	2	3	4	5	6	7	8	9	10	
•	•	•	•	•	•	•	•	•	•	1 3.
•	•	•	•	•	•	•	•	•	•	2 "
•	•	•	•	•	•	•	•	•	•	3 "
•	•	•	•	•	•	•	•	•	•	4 "
•	•	•	•	•	•	•	•	•	•	5 "
•	•	•	•	•	•	•	•	•	•	6 "
•	•	•	•	•	•	•	•	•	•	7 "
•	•	•	•	•	•	•	•	•	•	8 "
•	•	•	•	•	•	•	•	•	•	9 "
•	•	•	•	•	•	•	•	•	•	10 "

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	<b>20</b>
21	22	23	24	25	26	27	28	29	<b>30</b>
31	32	33	34	35	36	37	38	39	<b>40</b>
41	42	43	44	45	46	47	48	49	<b>50</b>
51	52	53	54	55	56	57	58	59	<b>60</b>
61	62	63	64	65	66	67	68	69	<b>70</b>
71	72	73	74	75	76	77	78	79	<b>80</b>
81	82	83	84	85	86	87	88	89	<b>90</b>
91	92	93	94	95	96	97	98	99	<b>100</b>

1. Wie heißen folgende Zahlen :

3 Z. 8 E.? — 4 Z. 2 E.? — 6 Z. 0 E.? — 9 Z. 7 E.?

2 Z. 9 E.? — 7 Z. 5 E.? — 1 Z. 1 E.? — 8 Z. 0 E.?

3 Z. 8 E. = acht und dreißig.

4 Z. 2 E. = zwei und vierzig.

2. Lies folgende Zahlen :

10, 20, 70, 40, 90, 30, 50, 60, 80, 100.

3. Lies : 23, 67, 34, 96, 17, 65, 82, 49 ;

29, 62, 48, 75, 91, 37, 88, 11 ;

32, 73, 56, 81, 45, 94, 19, 57 ;

24, 42, 87, 78, 16, 61, 39, 93.

4. Zerlege in Zehner und Einer :

25, 70, 34, 19, 80, 92, 59, 28 ;

86, 49, 21, 65, 13, 98, 30, 43 ;

72, 27, 51, 15, 53, 35, 67, 76.

25 = 2 Z. 5 E.

70 = 7 Z. 0 E.

5. Schreibe folgende Zahlen bloß mit Ziffern :

1 Z. 3 E. — 5 Z. 7 E. — 6 Z. 4 E. — 9 Z. 3 E.

8 Z. 9 E. — 3 Z. 6 E. — 7 Z. 0 E. — 6 Z. 8 E.

4 Z. 0 E. — 2 Z. 6 E. — 5 Z. 9 E. — 3 Z. 1 E.

6. Schreibe mit Ziffern alle Zehnerzahlen so untereinander, daß Einer unter Einer, Zehner unter Zehner stehen.

7. Schreibe ebenso alle Zahlen von zehn bis zwanzig — von fünfzig bis sechzig — von dreißig bis vierzig — von neunzig bis hundert — von siebenzig bis achtzig — von vierzig bis fünfzig.

8. Schreibe ebenso alle Zahlen von sechzehn bis acht und zwanzig.

9. Schreibe die Zahlen von fünf und dreißig bis sieben und fünfzig.

10. Schreibe alle Zahlen von vier und sechzig abwärts bis fünfzig.

11. Schreibe die Zahlen von neun und dreißig bis achtzehn.

**12.** Schreibe die Zahlen von sechs und neunzig bis ein und siebenzig.

**13.** Schreibe mit Ziffern: neun und zwanzig — fünf und achtzig — sieben und fünfzig — neunzig — ein und vierzig — vier und zwanzig — zwölf — ein und zwanzig — sieben und siebenzig.

**14.** Schreibe: sechs und dreißig — drei und sechzig — acht und fünfzig — fünf und achtzig — zwei und neunzig — neun und zwanzig.

## B. Das Rechnen im Zahlenraume von eins bis hundert.

### 1. Wiederholung der Rechnungsübungen im Zahlenraume bis zehn.

#### a. Zu- und Wegzählen.

— 1. —

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

— 2. —

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

## — 3. —

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

## — 4. —

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

## b. Vervielfachen und Messen.

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

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

## c. Anwendungen.

1. Karl kauft einen Federstiel für 6 h und Federn für 4 h; wieviel muß er dafür zahlen?

2. Anton ist 7 Jahre alt, seine Schwester ist 3 Jahre jünger; wie alt ist die Schwester?

3. 1 Apfel kostet 1 h; wieviel kosten 6 Äpfel?

4. 1 Citrone kostet 1 Zehnhellerstück; wieviel kosten 10 Stück Citronen?

5. Für 1 h erhält man 1 Bogen Papier; wieviel Bogen erhält man für 10 h?



## 2. Wiederholung der Rechnungsübungen im Zahlenraume bis zwanzig.

### a. Zu- und Wegzählen.

#### — 1. —

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

#### — 2. —

$6 + . = 12$	$7 + . = 14$	$5 + . = 13$	$6 + . = 12$
$3 + . = 11$	$4 + . = 12$	$2 + . = 11$	$9 + . = 17$
$6 + . = 13$	$8 + . = 17$	$7 + . = 15$	$8 + . = 14$

#### — 3. —

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

### b. Vervielfachen von 2 und mit 2.

1 • • 2	$1 \times 2 =$	$2 \times 1 =$
2 • • 4	$2 \times 2 =$	$2 \times 2 =$
3 • • 6	$3 \times 2 =$	$2 \times 3 =$
4 • • 8	$4 \times 2 =$	$2 \times 4 =$
5 • • 10	$5 \times 2 =$	$2 \times 5 =$
6 • • 12	$6 \times 2 =$	$2 \times 6 =$
7 • • 14	$7 \times 2 =$	$2 \times 7 =$
8 • • 16	$8 \times 2 =$	$2 \times 8 =$
9 • • 18	$9 \times 2 =$	$2 \times 9 =$
10 • • 20	$10 \times 2 =$	$2 \times 10 =$

## - 4. -

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

## c. Messen durch 2.

$6 = 3 \times 2;$	$2 \text{ in } 6 = 3$	$2 = . \times 2;$	$2 \text{ in } 2 =$
$10 = . \times 2;$	$2 \text{ in } 10 =$	$14 = . \times 2;$	$2 \text{ in } 14 =$
$4 = . \times 2;$	$2 \text{ in } 4 =$	$20 = . \times 2;$	$2 \text{ in } 20 =$
$18 = . \times 2;$	$2 \text{ in } 18 =$	$8 = . \times 2;$	$2 \text{ in } 8 =$
$12 = . \times 2;$	$2 \text{ in } 12 =$	$16 = . \times 2;$	$2 \text{ in } 16 =$

## - 5. -

$2 \text{ in } 12 = 6$	$2 \text{ in } 9 =$	$2 \text{ in } 11 =$	$2 \text{ in } 3 =$
$2 \text{ in } 13 = 6 (1)$	$2 \text{ in } 17 =$	$2 \text{ in } 19 =$	$2 \text{ in } 15 =$
$2 \text{ in } 1 = 0 (1)$	$2 \text{ in } 5 =$	$2 \text{ in } 7 =$	$2 \text{ in } 20 =$

## d. Theilen durch 2.

$8 = 2 \times 4;$	$1/2 \text{ v. } 8 =$	$6 = 2 \times .;$	$1/2 \text{ v. } 6 =$
$14 = 2 \times .;$	$1/2 \text{ v. } 14 =$	$2 = 2 \times .;$	$1/2 \text{ v. } 2 =$
$12 = 2 \times .;$	$1/2 \text{ v. } 12 =$	$18 = 2 \times .;$	$1/2 \text{ v. } 18 =$
$4 = 2 \times .;$	$1/2 \text{ v. } 4 =$	$16 = 2 \times .;$	$1/2 \text{ v. } 16 =$
$20 = 2 \times .;$	$1/2 \text{ v. } 20 =$	$10 = 2 \times .;$	$1/2 \text{ v. } 10 =$

## - 6. -

$1/2 \text{ v. } 4 =$	$1/2 \text{ v. } 8 =$	$1/2 \text{ v. } 12 =$	$1/2 \text{ v. } 10 + 1 =$
$1/2 \text{ v. } 10 =$	$1/2 \text{ v. } 2 =$	$1/2 \text{ v. } 18 =$	$1/2 \text{ v. } 20 - 2 =$
$1/2 \text{ v. } 16 =$	$1/2 \text{ v. } 14 =$	$1/2 \text{ v. } 6 =$	$1/2 \text{ v. } 8 + 3 =$

## e. Anwendungen.

1. 1 Zwanzighellerstück = 2 Zehnhellerstücke; wieviel Zehnhellerstücke sind 2, 3, 4, . . . 9, 10 Zwanzighellerstücke?

2 Zwanzighellerstücke =  $2 \times 2$  Zehnhellerstücke = 4 Zehnhellerstücke

3 " =  $3 \times 2$  " = 6 " u. s. w.

2. Wieviel Zweihellerstücke hat ein Zehnhellerstück?

" " " " Zwanzighellerstück?

3. Wieviel Tage sind 2 Wochen und 5 Tage?

4. 1 Krone = 10 Zehnhellerstücke; wieviel Zehnhellerstücke hat  $1/2$  Krone?

5. 1 Jahr = 12 Monate; wieviel Monate sind  $1/2$  Jahr?

6. Ein Landmann hat 14 Schafe, er kauft noch 6 Schafe dazu; wieviel hat er dann?

7. Du bist 7 Jahre alt; nach wieviel Jahren wirst du 16 Jahre alt sein?

8. Jemand hat 14 K zu bezahlen, er zahlt 8 K; wieviel bleibt er noch schuldig?

9. Von 18 Kühen werden 9 verkauft; wie viele bleiben noch übrig?

10. Von 16 kg erhält A 2 kg, B 3 kg, C 4 kg und D den Rest; wieviel erhält D?

11. 1 Birne kostet 2 h; wieviel kosten 2, 3, 4, 5 Birnen?

$$2 \text{ Birnen kosten } 2 \times 2 \text{ h} = 4 \text{ h}$$

$$3 \text{ " " } 3 \times 2 \text{ " } = 6 \text{ " u. s. w.}$$

12. Wieviel Tauben sind 6 Paar Tauben?

13. Ein Fuhrmann hat 8 Pferde; wieviel Wagen kann er damit bespannen, wenn er vor jeden Wagen 2 Pferde spannt?

14. Eine Feder kostet 2 h; wieviel Federn erhält man für 12, 8, 20, 16 h?

15. 2 Bleistifte kosten 16 h; was kostet 1 Bleistift?

16. Eine Mutter theilt 18 Nüsse unter ihre zwei Kinder zu gleichen Theilen; wieviel Nüsse erhält jedes derselben?

### 3. Rechnungsübungen im Zahlenraume bis dreißig.

a. Zu- und Wegzählen.

— 1. —

$4 + 2 =$	$6 + 3 =$	$12 + 7 =$	$18 + 2 =$	$16 + 7 =$
$14 + 2 =$	$16 + 3 =$	$23 + 1 =$	$18 + 4 =$	$19 + 4 =$
$24 + 2 =$	$26 + 3 =$	$21 + 6 =$	$17 + 3 =$	$12 + 9 =$
$3 + 5 =$	$5 + 4 =$	$17 + 2 =$	$17 + 6 =$	$14 + 8 =$
$13 + 5 =$	$15 + 4 =$	$24 + 3 =$	$15 + 5 =$	$18 + 5 =$
$23 + 5 =$	$25 + 4 =$	$22 + 5 =$	$15 + 9 =$	$13 + 9 =$

— 2. —

$5 - 3 =$	$7 - 2 =$	$12 - 1 =$	$25 - 5 =$	$27 - 9 =$
$15 - 3 =$	$17 - 2 =$	$26 - 4 =$	$25 - 6 =$	$22 - 4 =$
$25 - 3 =$	$27 - 2 =$	$19 - 8 =$	$23 - 3 =$	$26 - 7 =$
$9 - 6 =$	$8 - 5 =$	$25 - 5 =$	$23 - 7 =$	$24 - 5 =$
$19 - 6 =$	$18 - 5 =$	$29 - 7 =$	$21 - 1 =$	$28 - 9 =$
$29 - 6 =$	$28 - 5 =$	$16 - 3 =$	$21 - 8 =$	$25 - 8 =$

## - 3. -

$10 + 10 =$	$17 + 10 =$	$13 + 10 =$	$16 + 11 =$	$15 + 14 =$
$20 + 10 =$	$14 + 10 =$	$13 + 12 =$	$17 + 12 =$	$11 + 15 =$
$15 + 10 =$	$16 + 10 =$	$13 + 15 =$	$19 + 11 =$	$18 + 12 =$
$18 + 10 =$	$12 + 10 =$	$13 + 14 =$	$12 + 13 =$	$14 + 16 =$

## - 4. -

$20 - 10 =$	$26 - 10 =$	$28 - 10 =$	$27 - 13 =$	$23 - 11 =$
$30 - 10 =$	$21 - 10 =$	$28 - 13 =$	$29 - 18 =$	$27 - 15 =$
$29 - 10 =$	$24 - 10 =$	$23 - 12 =$	$25 - 12 =$	$30 - 12 =$
$25 - 10 =$	$27 - 10 =$	$26 - 14 =$	$24 - 14 =$	$30 - 17 =$
$23 - 10 =$	$22 - 10 =$	$24 - 11 =$	$28 - 16 =$	$30 - 23 =$

## - 5. -

$15 + . = 18$	$7 + . = 11$	$13 + . = 23$	$12 + . = 25$
$23 + . = 27$	$9 + . = 16$	$16 + . = 26$	$15 + . = 28$
$21 + . = 26$	$14 + . = 22$	$11 + . = 21$	$18 + . = 29$
$22 + . = 29$	$18 + . = 24$	$15 + . = 25$	$13 + . = 26$
$26 + . = 30$	$17 + . = 23$	$18 + . = 28$	$17 + . = 30$

## b. Bervielfachen von 3 und mit 3.

1 . . . 3	$1 \times 3 =$	$3 \times 1 =$
2 . . . 6	$2 \times 3 =$	$3 \times 2 =$
3 . . . 9	$3 \times 3 =$	$3 \times 3 =$
4 . . . 12	$4 \times 3 =$	$3 \times 4 =$

u. f. w.

$$10 \times 3 = \quad 3 \times 10 =$$

## - 6. -

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

## - 7. -

$1 \times 3 + 2 =$	$4 \times 2 + 7 =$	$3 \times 4 - 8 =$	$2 \times 4 - 5 =$
$4 \times 3 + 8 =$	$8 \times 2 + 12 =$	$3 \times 7 - 7 =$	$2 \times 8 - 7 =$
$7 \times 3 + 5 =$	$5 \times 2 + 10 =$	$3 \times 8 - 12 =$	$2 \times 10 - 16 =$
$9 \times 3 + 3 =$	$6 \times 2 + 8 =$	$3 \times 5 - 7 =$	$2 \times 7 - 6 =$

## c. Messen durch 3.

15 = . × 3; <b>3</b> in 15 =	27 = . × 3; <b>3</b> in 27 =
6 = . × 3; <b>3</b> in 6 =	3 = . × 3; <b>3</b> in 3 =
24 = . × 3; <b>3</b> in 24 =	30 = . × 3; <b>3</b> in 30 =
9 = . × 3; <b>3</b> in 9 =	21 = . × 3; <b>3</b> in 21 =
12 = . × 3; <b>3</b> in 12 =	18 = . × 3; <b>3</b> in 18 =

— 8. —

3 in 24 =	3 in 13 =	3 in 28 =	2 in 12 =	2 in 14 =
3 in 26 =	3 in 21 =	3 in 6 =	2 in 19 =	2 in 17 =
3 in 15 =	3 in 22 =	3 in 11 =	2 in 7 =	2 in 3 =
3 in 16 =	3 in 10 =	3 in 20 =	2 in 18 =	2 in 16 =
3 in 23 =	3 in 27 =	3 in 4 =	2 in 5 =	2 in 11 =
3 in 8 =	3 in 17 =	3 in 24 =	2 in 8 =	2 in 10 =

## d. Theilen durch 3.

18 = 3 × .; $\frac{1}{3}$ v. <b>18</b> =	21 = 3 × .; $\frac{1}{3}$ v. <b>21</b> =
9 = 3 × .; $\frac{1}{3}$ v. <b>9</b> =	30 = 3 × .; $\frac{1}{3}$ v. <b>30</b> =
12 = 3 × .; $\frac{1}{3}$ v. <b>12</b> =	6 = 3 × .; $\frac{1}{3}$ v. <b>6</b> =
27 = 3 × .; $\frac{1}{3}$ v. <b>27</b> =	15 = 3 × .; $\frac{1}{3}$ v. <b>15</b> =
3 = 3 × .; $\frac{1}{3}$ v. <b>3</b> =	24 = 3 × .; $\frac{1}{3}$ v. <b>24</b> =

— 9. —

$\frac{1}{3}$ v. 15 =	$\frac{1}{3}$ v. 12 =	$\frac{1}{2}$ v. 8 =	$\frac{1}{2}$ v. 14 + 8 =
$\frac{1}{2}$ v. 6 =	$\frac{1}{2}$ v. 12 =	$\frac{1}{3}$ v. 3 =	$\frac{1}{3}$ v. 21 - 4 =
$\frac{1}{3}$ v. 6 =	$\frac{1}{3}$ v. 27 =	$\frac{1}{2}$ v. 18 =	$\frac{1}{3}$ v. 12 + 6 =
$\frac{1}{2}$ v. 10 =	$\frac{1}{3}$ v. 9 =	$\frac{1}{3}$ v. 18 =	$\frac{1}{2}$ v. 16 - 2 =
$\frac{1}{3}$ v. 21 =	$\frac{1}{2}$ v. 16 =	$\frac{1}{3}$ v. 24 =	$\frac{1}{3}$ v. 27 + 5 =

## e. Anwendungen.

1. Wieviel *dm* sind 2 *m* 6 *dm*?
2. Wieviel Stück sind 1 Duzend und 9 Stück?
3. Wieviel Stunden sind 1 Tag und 5 Stunden?
4. Wieviel Monate sind 1 Jahr und 10 Monate?

5. In einem Garten stehen 16 Birnbäume und 12 Apfelbäume; wieviel Obstbäume sind in dem Garten?

6. Von 26 *m* Leinwand werden einmal 8 und dann 6 *m* abgeschnitten; wieviel *m* enthält noch der Rest?

7. Ein Bleistift kostet 7 h; wieviel kosten 3 Bleistifte?
8. 1 l Bier kostet 3 Zehnhellerstücke; wieviel kosten 2, 3 ... 10 l?  
 2 l kosten  $2 \times 3$  Zehnhellerstücke = 6 Zehnhellerstücke.  
 3 " "  $3 \times 3$  " = 9 " u. s. w.
9. Ein Strohhut kostet 3 K; wieviel kosten 2, 3, ...  
 10 Strohhüte?
10. Für 1 K kauft man 3 kg Salz; wieviel für 2, 6, 8, 5,  
 7, 10 K?
11. Jemand will unter 6 Arme Geld vertheilen und jedem  
 3 h geben; wieviel h braucht er dazu?
12. Zu einem Schreibhefte braucht man 3 Bogen Papier; wieviel  
 solche Schreibhefte kann man aus 15 Bogen machen?
13. Jemand erspart monatlich 3 K; in wieviel Monaten erspart  
 er 30 K?
14. 3 m Tuch kosten 27 K; wieviel kostet 1 m?
15. Zu 3 Hemden braucht man 9 m Leinwand; wieviel zu  
 1 Hemd?

#### 4. Rechnungsübungen im Zahlenraume bis vierzig.

##### a. Zu- und Wegzählen.

##### — 1. —

$7 + 2 =$	$34 + 3 =$	$29 + 1 =$	$23 + 9 =$	$33 + . = 38$
$17 + 2 =$	$31 + 7 =$	$29 + 3 =$	$28 + 5 =$	$36 + . = 39$
$27 + 2 =$	$35 + 4 =$	$25 + 5 =$	$26 + 7 =$	$24 + . = 32$
$37 + 2 =$	$32 + 6 =$	$25 + 8 =$	$27 + 8 =$	$28 + . = 35$

##### — 2. —

$8 - 3 =$	$39 - 7 =$	$32 - 2 =$	$35 - 8 =$	$32 - 7 =$
$18 - 3 =$	$34 - 2 =$	$32 - 3 =$	$31 - 5 =$	$35 - 9 =$
$28 - 3 =$	$37 - 5 =$	$34 - 4 =$	$36 - 9 =$	$37 - 8 =$
$38 - 3 =$	$32 - 1 =$	$34 - 7 =$	$33 - 6 =$	$33 - 6 =$

##### — 3. —

$10 + 10 =$	$23 + 10 =$	$25 + 10 =$	$16 + 20 =$	$20 + . = 40$
$20 + 10 =$	$27 + 10 =$	$25 + 13 =$	$16 + 23 =$	$10 + . = 30$
$30 + 10 =$	$14 + 20 =$	$23 + 14 =$	$13 + 27 =$	$27 + . = 37$
$20 + 20 =$	$18 + 20 =$	$26 + 12 =$	$15 + 16 =$	$16 + . = 34$

## - 4. -

$20 - 10 =$	$38 - 10 =$	$32 - 20 =$	$36 - 15 =$	$38 - 25 =$
$30 - 10 =$	$36 - 10 =$	$35 - 20 =$	$39 - 17 =$	$31 - 16 =$
$40 - 10 =$	$31 - 10 =$	$39 - 20 =$	$34 - 12 =$	$35 - 19 =$
$30 - 20 =$	$37 - 10 =$	$34 - 20 =$	$37 - 13 =$	$32 - 27 =$

b. Bervielfachen von 4 und mit 4.

$$1 \cdot \cdot \cdot \cdot 4 \quad 1 \times 4 = \quad 4 \times 1 =$$

$$2 \cdot \cdot \cdot \cdot 8 \quad 2 \times 4 = \quad 4 \times 2 =$$

$$3 \cdot \cdot \cdot \cdot 12 \quad 3 \times 4 = \quad 4 \times 3 =$$

u. f. w.

## - 5. -

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

## - 6. -

$2 \times 4 + 3 =$	$4 \times 7 + 12 =$	$5 \times 2 + 4 =$	$6 \times 3 - 12 =$
$5 \times 4 - 7 =$	$4 \times 9 - 15 =$	$3 \times 7 - 6 =$	$2 \times 8 + 16 =$
$4 \times 4 + 2 =$	$4 \times 3 + 21 =$	$9 \times 2 + 7 =$	$3 \times 9 - 18 =$
$8 \times 4 - 5 =$	$4 \times 10 - 27 =$	$8 \times 1 - 5 =$	$5 \times 3 + 23 =$

c. Messen durch 4.

$36 = \cdot \times 4;$	$4 \text{ in } 36 =$	$28 = \cdot \times 4;$	$4 \text{ in } 28 =$
$20 = \cdot \times 4;$	$4 \text{ in } 20 =$	$4 = \cdot \times 4;$	$4 \text{ in } 4 =$
$8 = \cdot \times 4;$	$4 \text{ in } 8 =$	$24 = \cdot \times 4;$	$4 \text{ in } 24 =$
$40 = \cdot \times 4;$	$4 \text{ in } 40 =$	$12 = \cdot \times 4;$	$4 \text{ in } 12 =$
$16 = \cdot \times 4;$	$4 \text{ in } 16 =$	$32 = \cdot \times 4;$	$4 \text{ in } 32 =$

## - 7. -

Wie vielmal ist 4 enthalten in:

21, 38, 31, 25, 33, 5, 29, 26, 39, 2;

17, 34, 23, 18, 11, 14, 3, 9, 22, 27;

15, 6, 35, 1, 13, 30, 10, 19, 7, 37?

$$4 \text{ in } 21 = 5 \text{ (1)} \quad | \quad 4 \text{ in } 17 = \quad | \quad 4 \text{ in } 15 =$$

$$4 \text{ in } 38 = \quad | \quad 4 \text{ in } 34 = \quad | \quad 4 \text{ in } 6 =$$

u. f. w. u. f. w. u. f. w.

Wie oft ist enthalten :

2 in 13, 8, 15, 12, 3, 11, 4, 16, 5, 10 ?

3 in 9, 25, 12, 20, 18, 7, 24, 8, 15, 28 ?

4 in 20, 13, 8, 21, 10, 36, 16, 23, 7, 32 ?

d. Theilen durch 4.

20 = 4 × . ;	1/4 v. 20 =	32 = 4 × . ;	1/4 v. 32 =
36 = 4 × . ;	1/4 v. 36 =	12 = 4 × . ;	1/4 v. 12 =
4 = 4 × . ;	1/4 v. 4 =	40 = 4 × . ;	1/4 v. 40 =
16 = 4 × . ;	1/4 v. 16 =	8 = 4 × . ;	1/4 v. 8 =
28 = 4 × . ;	1/4 v. 28 =	24 = 4 × . ;	1/4 v. 24 =

— 9. —

1/4 v. 8 =	1/3 v. 18 =	1/4 v. 36 =	1/2 v. 12 + 7 =
1/2 v. 8 =	1/4 v. 28 =	1/2 v. 14 =	1/4 v. 28 - 3 =
1/2 v. 12 =	1/4 v. 24 =	1/4 v. 20 =	1/2 v. 10 + 8 =
1/3 v. 12 =	1/3 v. 24 =	1/3 v. 15 =	1/3 v. 21 - 5 =
1/4 v. 12 =	1/4 v. 32 =	1/4 v. 16 =	1/4 v. 8 + 6 =

e. Anwendungen.

1. Wieviel Zehnhellerstücke erhält man für 2, 3, 4 K ?
2. Wieviel Heller sind 3 Zehnhellerstücke und 3 h ?
3. Wieviel Monate sind 1/2, 1/3, 1/4 Jahr ?
4. Wieviel Stück sind 1/2, 1/3, 1/4 Duzend ?
5. In einem Keller sind 2 Fässer, das eine enthält 18, das andere 16 hl Wein; wieviel Wein ist in beiden Fässern ?
6. Wieviel Tage sind vom 13. bis 31. März ?
7. Von 40 kg werden 9 kg verbraucht; wieviel bleibt übrig ?
8. Ein Wagen hat 4 Räder; wieviel Räder haben 6, 9, 3, 7 Wagen ?
9. Eine Kuh gibt täglich 6 l Milch; wieviel l in 4 Tagen ?
10. Eine Abtheilung Soldaten marschirt in 9 Reihen zu 4 Mann; wieviel Soldaten sind es ?
11. In einem Garten stehen 8 Reihen Obstbäume, in jeder Reihe 4 Stück; wieviel Obstbäume stehen in dem Garten ?
12. Ein Knabe hat in der rechten Tasche 4 Zehnhellerstücke, in der linken 3 Zehnhellerstücke; wieviel Heller besitzt er ?



13. Eine Frau kauft 9 kg Kaffee, das kg zu 4 K; wieviel K gibt sie dafür aus?

14. Die Mutter braucht täglich 4 Eier; wie lange kommt sie mit 28 Eiern aus?

15. Jemand kauft für 32 h Semmeln, das Stück zu 4 h; wieviel Stück sind es?

16. Aus 12 Bogen Papier will man 4 gleiche Schreibhefte machen; wieviel Bogen wird man zu jedem Schreibhefte nehmen?

17. Ein Landwirt zahlte 36 K an seine Arbeiter; wieviel Arbeiter waren es, wenn jeder derselben 4 K zu erhalten hatte?

18. 1 l Bier kostet 40 h; wieviel kostet  $\frac{1}{4}$  l?

## 5. Rechnungsübungen im Zahlenraume bis fünfzig.

a. Zu- und Wegzählen.

— 1. —

Rechne folgende Reihen:

1. $1 + 2$	2. $2 + 2$	6. $50 - 2$	7. $49 - 2$
$1 + 2 = 3$	$2 + 2 = 4$	$50 - 2 = 48$	$49 - 2 = 47$
$3 + 2 = 5$	$4 + 2 = 6$	$48 - 2 = 46$	$47 - 2 = 45$
$5 + 2 = 7$	u. f. w.	$46 - 2 = 44$	u. f. w.
$7 + 2 = 9$	3. $1 + 3$	$44 - 2 = 42$	8. $50 - 3$
u. f. w.	4. $2 + 3$	u. f. w.	9. $49 - 3$
bis 49.	5. $3 + 3$	bis 0.	10. $48 - 3$

— 2. —

$20 + 10 =$	$35 + 10 =$	$21 + 20 =$	$32 + 15 =$	$20 + . = 50$
$20 + 20 =$	$39 + 10 =$	$27 + 20 =$	$36 + 12 =$	$36 + . = 46$
$30 + 10 =$	$33 + 10 =$	$13 + 30 =$	$22 + 24 =$	$15 + . = 45$
$30 + 20 =$	$25 + 20 =$	$17 + 30 =$	$18 + 32 =$	$25 + . = 46$
$20 + 30 =$	$28 + 20 =$	$19 + 30 =$	$24 + 19 =$	$17 + . = 43$

— 3. —

$30 - 10 =$	$46 - 10 =$	$49 - 20 =$	$43 - 12 =$	$46 - 32 =$
$30 - 20 =$	$43 - 10 =$	$41 - 20 =$	$48 - 17 =$	$41 - 35 =$
$40 - 10 =$	$48 - 10 =$	$45 - 30 =$	$46 - 13 =$	$48 - 29 =$
$40 - 20 =$	$44 - 20 =$	$42 - 30 =$	$47 - 24 =$	$42 - 18 =$
$40 - 30 =$	$47 - 20 =$	$46 - 30 =$	$49 - 25 =$	$50 - 27 =$

## b. Vervielfachen von 5 und mit 5.

1 • • • • • 5	$1 \times 5 =$	$5 \times 1 =$
2 • • • • • 10	$2 \times 5 =$	$5 \times 2 =$
3 • • • • • 15	$3 \times 5 =$	$5 \times 3 =$

u. f. w.

— 4. —

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

— 5. —

$3 \times 5 + 1 =$	$2 \times 5 + 2 =$	$4 \times 8 + 12 =$	$6 \times 5 + 20 =$
$7 \times 4 - 3 =$	$9 \times 3 - 4 =$	$5 \times 7 - 15 =$	$2 \times 9 + 25 =$
$6 \times 5 + 5 =$	$6 \times 4 + 6 =$	$8 \times 3 + 23 =$	$9 \times 5 - 27 =$
$8 \times 3 - 7 =$	$4 \times 5 - 8 =$	$5 \times 5 - 13 =$	$5 \times 8 - 23 =$

## c. Messen durch 5.

$15 = . \times 5;$	$5 \text{ in } 15 =$	$10 = . \times 5;$	$5 \text{ in } 10 =$
$30 = . \times 5;$	$5 \text{ in } 30 =$	$25 = . \times 5;$	$5 \text{ in } 25 =$
$45 = . \times 5;$	$5 \text{ in } 45 =$	$40 = . \times 5;$	$5 \text{ in } 40 =$
$5 = . \times 5;$	$5 \text{ in } 5 =$	$35 = . \times 5;$	$5 \text{ in } 35 =$
$20 = . \times 5;$	$5 \text{ in } 20 =$	$50 = . \times 5;$	$5 \text{ in } 50 =$

— 6. —

Wie oft ist enthalten:

3 in 26, 15, 23, 21, 6, 28, 13, 18, 7, 29?

5 in 30, 27, 12, 40, 35, 14, 3, 50, 42, 18?

2 in 13, 19, 9, 14, 20, 16, 15, 7, 17, 4?

4 in 12, 35, 30, 38, 28, 6, 36, 24, 8, 22?

## d. Theilen durch 5.

$35 = 5 \times .;$	$\frac{1}{5} \text{ v. } 35 =$	$50 = 5 \times .;$	$\frac{1}{5} \text{ v. } 50 =$
$20 = 5 \times .;$	$\frac{1}{5} \text{ v. } 20 =$	$5 = 5 \times .;$	$\frac{1}{5} \text{ v. } 5 =$
$15 = 5 \times .;$	$\frac{1}{5} \text{ v. } 15 =$	$25 = 5 \times .;$	$\frac{1}{5} \text{ v. } 25 =$
$40 = 5 \times .;$	$\frac{1}{5} \text{ v. } 40 =$	$30 = 5 \times .;$	$\frac{1}{5} \text{ v. } 30 =$
$10 = 5 \times .;$	$\frac{1}{5} \text{ v. } 10 =$	$45 = 5 \times .;$	$\frac{1}{5} \text{ v. } 45 =$

## — 7. —

$\frac{1}{5}$ v. 25 =	$\frac{1}{4}$ v. 20 =	$\frac{1}{5}$ v. 45 =	$\frac{1}{3}$ v. 12 + 4 =
$\frac{1}{5}$ v. 15 =	$\frac{1}{5}$ v. 20 =	$\frac{1}{4}$ v. 16 =	$\frac{1}{5}$ v. 10 + 8 =
$\frac{1}{3}$ v. 15 =	$\frac{1}{5}$ v. 35 =	$\frac{1}{5}$ v. 40 =	$\frac{1}{4}$ v. 16 + 2 =
$\frac{1}{2}$ v. 18 =	$\frac{1}{2}$ v. 12 =	$\frac{1}{3}$ v. 9 =	$\frac{1}{5}$ v. 35 - 3 =
$\frac{1}{4}$ v. 28 =	$\frac{1}{5}$ v. 10 =	$\frac{1}{2}$ v. 14 =	$\frac{1}{3}$ v. 24 - 5 =
$\frac{1}{3}$ v. 27 =	$\frac{1}{3}$ v. 21 =	$\frac{1}{5}$ v. 30 =	$\frac{1}{2}$ v. 14 - 7 =

## e. Anwendungen.

1. Wieviel Zwanzighellerstücke sind 2, 3, 4, . . . 10 K? —  
Wieviel Kronen sind 15, 25, 10, 45, 30 Zwanzighellerstücke?

2. Wieviel Heller sind 2, 3, 4, 5 Zehnhellerstücke? — Wieviel  
Zweihellerstücke sind 10, 14, 18, 8, 20 h?

3. Wieviel Heller sind a) 4 Zehnhellerstücke und 3 h? b) 4 Zehn-  
hellerstücke und 8 h?

4. Wieviel Zehnhellerstücke und Heller sind 42, 45, 49 h?

5. Wieviel Kronen betragen 2, 3, 4, 5 Zehnkronenstücke?

6. Wieviel *dm* sind 2, 3, 4, 5 *m*?

7. Wieviel *g* sind 2, 3, 4, 5 *dkg*?

8. Wieviel Bogen Papier sind 2, 3, 4, 5 Lagen?

9. Deine Mutter ist 36 Jahre alt, dein Vater ist 8 Jahre  
älter; wie alt ist der Vater?

10. Ein Stück Zeug enthält 26 *m*, ein zweites Stück 10 *m*;  
wieviel *m* enthalten beide?

11. Eine Ware wird für 35 K gekauft; beim Verkaufe gewinnt  
man 6 K; wie theuer wird sie verkauft?

12. In einem Dorfe standen vor einem Brande 48 Häuser, nach  
demselben nur 28; wieviel Häuser sind abgebrannt?

13. Ein Fäßchen mit Öl wiegt 43 *kg*, das Fäßchen allein  
7 *kg*; wieviel *kg* Öl sind darin?

14. An 1 Hand sind 5 Finger; wieviel Finger sind an  
2, 3, . . . 10 Händen?

15. 1 *hl* Kartoffeln kostet 5 K; wieviel kosten 2, 3, . . . 10 *hl*?

16. Eine Kuh gibt täglich 5 l Milch; in wieviel Tagen gibt sie 35 l?

17. Für 1 K erhält man 3 m Band; wieviel für 7, 3, 9, 6 K?

18. 45 Kirschen sollen zu gleichen Theilen unter 5 Kinder getheilt werden; wieviel erhält jedes?

19. Wieviel Häufchen, jedes von 5 Nüssen, kann man aus 40 Nüssen machen?

20. 1 m Baumwollleinwand kostet 45 h; wieviel kostet  $\frac{1}{3}$  m?

21. 5 kg Marillen kosten 25 Zehnhellerstücke; wieviel Heller kostet 1 kg?

## 6. Rechnungsübungen im Zahlenraume bis sechzig.

a. Zu- und Wegzählen.

— 1. —

Rechne die Reihen:

1. $2 + 4$	4. $4 + 4$	10. $59 - 4$	13. $58 - 4$
$2 + 4 = 6$	5. $1 + 5$	$59 - 4 = 55$	14. $60 - 5$
$6 + 4 = 10$	6. $3 + 5$	$55 - 4 = 51$	15. $56 - 5$
bis 58.	7. $5 + 5$	bis 3.	16. $57 - 5$
2. $1 + 4$	8. $2 + 5$	11. $60 - 4$	17. $59 - 5$
3. $3 + 4$	9. $4 + 5$	12. $57 - 4$	18. $58 - 5$

— 2. —

$30 + 10 =$	$45 + 10 =$	$41 + 10 =$	$46 + 12 =$	$39 + 21 =$
$20 + 20 =$	$38 + 20 =$	$29 + 30 =$	$41 + 17 =$	$28 + 26 =$
$20 + 30 =$	$32 + 20 =$	$36 + 10 =$	$34 + 14 =$	$37 + 19 =$
$30 + 20 =$	$21 + 30 =$	$18 + 30 =$	$23 + 27 =$	$19 + 34 =$

— 3. —

$40 - 10 =$	$59 - 10 =$	$54 - 20 =$	$56 - 13 =$	$60 - 37 =$
$50 - 10 =$	$51 - 10 =$	$58 - 30 =$	$54 - 12 =$	$52 - 19 =$
$60 - 20 =$	$56 - 10 =$	$55 - 30 =$	$58 - 25 =$	$55 - 26 =$
$30 - 20 =$	$53 - 20 =$	$51 - 40 =$	$57 - 34 =$	$51 - 45 =$

— 4. —

$52 + . = 58$	$40 + . = 60$	$37 + 9 + 3 =$	$30 + 20 + 10 =$
$55 + . = 59$	$20 + . = 50$	$42 + 6 + 8 =$	$27 + 10 + 20 =$
$53 + . = 57$	$36 + . = 56$	$60 - 7 - 5 =$	$60 - 30 - 10 =$
$54 + . = 60$	$47 + . = 57$	$58 - 4 - 9 =$	$23 + 12 + 23 =$

## b. Vervielfachen von 6 und mit 6.

1 . . . . . 6	$1 \times 6 =$	$6 \times 1 =$
2 . . . . . 12	$2 \times 6 =$	$6 \times 2 =$
3 . . . . . 18	$3 \times 6 =$	$6 \times 3 =$

u. f. w.

— 5. —

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

— 6. —

$5 \times 6 + 1 =$	$8 \times 3 - 4 =$	$5 \times 5 + 13 =$	$3 \times 6 - 12 =$
$3 \times 4 + 5 =$	$6 \times 6 - 8 =$	$7 \times 6 + 17 =$	$4 \times 4 - 14 =$
$8 \times 6 + 3 =$	$4 \times 5 - 6 =$	$9 \times 2 + 27 =$	$10 \times 2 - 18 =$
$7 \times 2 + 8 =$	$9 \times 6 - 9 =$	$3 \times 3 + 48 =$	$4 \times 6 - 19 =$

## c. Messen durch 6.

$24 = . \times 6;$	$6 \text{ in } 24 =$	$36 = . \times 6;$	$6 \text{ in } 36 =$
$6 = . \times 6;$	$6 \text{ in } 6 =$	$12 = . \times 6;$	$6 \text{ in } 12 =$
$18 = . \times 6;$	$6 \text{ in } 18 =$	$54 = . \times 6;$	$6 \text{ in } 54 =$
$48 = . \times 6;$	$6 \text{ in } 48 =$	$42 = . \times 6;$	$6 \text{ in } 42 =$
$60 = . \times 6;$	$6 \text{ in } 60 =$	$30 = . \times 6;$	$6 \text{ in } 30 =$

— 7. —

Wie oft ist enthalten :

2 in 7, 16, 18, 9, 14, 10, 13, 11, 6, 15?

4 in 13, 10, 6, 16, 7, 18, 9, 14, 12, 5?

5 in 45, 28, 32, 20, 46, 9, 15, 29, 43, 32?

3 in 24, 4, 15, 22, 6, 25, 12, 27, 17, 26?

6 in 30, 52, 8, 25, 42, 16, 28, 54, 20, 45?

## d. Theilen durch 6.

$24 = 6 \times .;$	$\frac{1}{6} \text{ v. } 24 =$	$42 = 6 \times .;$	$\frac{1}{6} \text{ v. } 42 =$
$6 = 6 \times .;$	$\frac{1}{6} \text{ v. } 6 =$	$30 = 6 \times .;$	$\frac{1}{6} \text{ v. } 30 =$
$36 = 6 \times .;$	$\frac{1}{6} \text{ v. } 36 =$	$48 = 6 \times .;$	$\frac{1}{6} \text{ v. } 48 =$
$12 = 6 \times .;$	$\frac{1}{6} \text{ v. } 12 =$	$18 = 6 \times .;$	$\frac{1}{6} \text{ v. } 18 =$
$60 = 6 \times .;$	$\frac{1}{6} \text{ v. } 60 =$	$54 = 6 \times .;$	$\frac{1}{6} \text{ v. } 54 =$

$\frac{1}{6} v. 18 =$	$\frac{1}{4} v. 24 =$	$\frac{1}{5} v. 35 =$	$\frac{1}{6} v. 12 + 8 =$
$\frac{1}{6} v. 42 =$	$\frac{1}{5} v. 30 =$	$\frac{1}{6} v. 24 =$	$\frac{1}{5} v. 25 + 9 =$
$\frac{1}{6} v. 36 =$	$\frac{1}{6} v. 30 =$	$\frac{1}{4} v. 28 =$	$\frac{1}{4} v. 16 + 7 =$
$\frac{1}{6} v. 6 =$	$\frac{1}{3} v. 15 =$	$\frac{1}{2} v. 10 =$	$\frac{1}{2} v. 14 - 5 =$
$\frac{1}{6} v. 54 =$	$\frac{1}{2} v. 12 =$	$\frac{1}{3} v. 21 =$	$\frac{1}{3} v. 18 - 6 =$

## e. Anwendungen.

1. Wieviel Heller sind 5 Zehnhellerstücke und 4 Heller?
  2. Wieviel Zehnhellerstücke und Heller sind 51 Heller?
  3. Wieviel *dm* sind 5 *m* 8 *dm*?
  4. Eine Woche hat 6 Arbeitstage; wieviel Arbeitstage haben 2, 3, 4, . . . 10 Wochen?
- 
5. Jemand kaufte ein Kalb für 45 K und verkaufte es später mit 10 K Gewinn; wie theuer verkaufte er es?
  6. Ein Handwerker arbeitet vormittags 4 Stunden 40 Minuten, nachmittags 5 Stunden 18 Minuten; wie lange hat er an diesem Tage gearbeitet?
  7. Ein Landmann erhält für eine Wiese jährlich 52 K Pachtzins und muß von derselben 6 K Steuer zahlen; wieviel beträgt der Überschuss?
  8. Ein Vater ist 54 Jahre alt, sein Sohn 18 Jahre; um wieviel ist der Sohn jünger als der Vater?
  9. Wieviel bleibt von 48 K 60 h übrig, wenn man davon 5 K 32 h ausgibt?
  10. 1 Würfel hat 6 Flächen; wieviel Flächen haben 2, 3, 4, . . . 10 Würfel?
  11. In einem Garten stehen die Bäumchen zu 6 in einer Reihe; wieviel Bäumchen stehen in 2, 3, . . . 10 Reihen?
  12. Für 1 K erhält man 6 l Milch; wieviel für 2, 3, 4, . . . 10 K?
  13. In einer Wohnung sind 8 Fenster, jedes hat 6 Glastafeln; wieviel Glastafeln haben alle zusammen?
  14. Ein Hut kostet 6 K; wieviel Hüte kann man für 42 K kaufen?
  15. Für 5 Zweihellerstücke bekommt man 45 Kirschen; wieviel für 1 Zweihellerstück?

## 7. Rechnungsübungen im Zahlenraume bis siebenzig.

a. Zu- und Wegzählen.

— 1. —

Rechne die Reihen:

1. $1 + 6$	4. $2 + 6$	10. $70 - 6$	13. $68 - 6$
$1 + 6 = 7$	5. $6 + 6$	$70 - 6 = 64$	14. $66 - 6$
$7 + 6 = 13$	6. $3 + 7$	$64 - 6 = 58$	15. $67 - 7$
bis 67.	7. $5 + 7$	bis 4.	16. $64 - 7$
2. $3 + 6$	8. $4 + 7$	11. $65 - 6$	17. $70 - 7$
3. $5 + 6$	9. $7 + 7$	12. $69 - 6$	18. $65 - 7$

— 2. —

$60 + 10 =$	$53 + 10 =$	$35 + 30 =$	$54 + 13 =$	$18 + 45 =$
$10 + 20 =$	$47 + 20 =$	$28 + 40 =$	$51 + 17 =$	$37 + 26 =$
$30 + 20 =$	$44 + 20 =$	$23 + 40 =$	$42 + 25 =$	$49 + 13 =$
$40 + 20 =$	$36 + 30 =$	$12 + 50 =$	$35 + 32 =$	$26 + 38 =$

— 3. —

$60 - 10 =$	$62 - 10 =$	$66 - 30 =$	$68 - 15 =$	$62 - 35 =$
$60 - 20 =$	$65 - 20 =$	$69 - 40 =$	$69 - 26 =$	$67 - 54 =$
$60 - 40 =$	$61 - 20 =$	$63 - 40 =$	$63 - 24 =$	$68 - 42 =$
$70 - 30 =$	$68 - 30 =$	$67 - 50 =$	$61 - 37 =$	$65 - 28 =$

— 4. —

$63 + . = 68$	$50 + . = 60$	$48 + 8 + 7 =$	$10 + 20 + 40 =$
$62 + . = 69$	$40 + . = 70$	$42 + 6 + 9 =$	$70 - 30 - 20 =$
$64 + . = 67$	$56 + . = 66$	$70 - 5 - 8 =$	$24 + 20 + 10 =$
$67 + . = 70$	$37 + . = 67$	$67 - 9 - 2 =$	$67 - 10 - 40 =$

b. Vervielfachen von 7 und mit 7.

1 . . . . . 7	$1 \times 7 =$	$7 \times 1 =$
2 . . . . . 14	$2 \times 7 =$	$7 \times 2 =$
3 . . . . . 21	$3 \times 7 =$	$7 \times 3 =$

u. f. w.

— 5. —

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

## - 6. -

$2 \times 10 =$	$6 \times 10 =$	$3 \times 12 =$	$2 \times 16 =$	$3 \times 14 =$
$3 \times 10 =$	$2 \times 20 =$	$3 \times 10 = 30$	$2 \times 23 =$	$3 \times 23 =$
$4 \times 10 =$	$3 \times 20 =$	$3 \times 2 = 6$	$2 \times 34 =$	$4 \times 12 =$
$5 \times 10 =$	$2 \times 30 =$	$3 \times 12 = 36$	$3 \times 15 =$	$5 \times 13 =$

## - 7. -

$3 \times 6 + 7 =$	$2 \times 7 + 6 =$	$3 \times 3 + 2 =$	$2 \times 18 + 14 =$
$7 \times 5 - 5 =$	$5 \times 6 - 3 =$	$4 \times 7 - 5 =$	$2 \times 32 - 26 =$
$4 \times 2 + 9 =$	$3 \times 4 + 4 =$	$7 \times 8 + 9 =$	$3 \times 16 + 17 =$
$6 \times 4 - 8 =$	$7 \times 9 - 7 =$	$6 \times 9 - 6 =$	$4 \times 15 - 34 =$

## c. Messen durch 7.

$35 = . \times 7;$	$7 \text{ in } 35 =$	$49 = . \times 7;$	$7 \text{ in } 49 =$
$14 = . \times 7;$	$7 \text{ in } 14 =$	$7 = . \times 7;$	$7 \text{ in } 7 =$
$56 = . \times 7;$	$7 \text{ in } 56 =$	$28 = . \times 7;$	$7 \text{ in } 28 =$
$21 = . \times 7;$	$7 \text{ in } 21 =$	$42 = . \times 7;$	$7 \text{ in } 42 =$
$63 = . \times 7;$	$7 \text{ in } 63 =$	$70 = . \times 7;$	$7 \text{ in } 70 =$

## - 8. -

Wie oft ist enthalten:

4 in 21, 40, 7, 18, 37, 30, 16, 38, 26, 20?

2 in 17, 19, 12, 5, 16, 13, 7, 20, 9, 15?

6 in 60, 39, 50, 38, 10, 49, 36, 53, 24, 43?

5 in 14, 33, 47, 25, 41, 15, 29, 38, 27, 35?

3 in 18, 10, 19, 15, 25, 11, 26, 9, 13, 24?

7 in 40, 29, 35, 49, 12, 44, 63, 46, 58, 27?

## - 9. -

$2 \text{ in } 20 =$	$2 \text{ in } 46 =$	$2 \text{ in } 24 =$	$3 \text{ in } 36 =$
$2 \text{ in } 40 =$	$2 \text{ in } 40 = 20$	$2 \text{ in } 28 =$	$3 \text{ in } 39 =$
$2 \text{ in } 60 =$	$2 \text{ in } 6 = 3$	$2 \text{ in } 48 =$	$3 \text{ in } 33 =$
$2 \text{ in } 30 =$		$2 \text{ in } 42 =$	$3 \text{ in } 69 =$
$2 \text{ in } 50 =$	$2 \text{ in } 46 = 23$	$2 \text{ in } 66 =$	$4 \text{ in } 48 =$

## d. Theilen durch 7.

$21 = 7 \times .;$	$1/7 \text{ v. } 21 =$	$42 = 7 \times .;$	$1/7 \text{ v. } 42 =$
$49 = 7 \times .;$	$1/7 \text{ v. } 49 =$	$70 = 7 \times .;$	$1/7 \text{ v. } 70 =$
$7 = 7 \times .;$	$1/7 \text{ v. } 7 =$	$35 = 7 \times .;$	$1/7 \text{ v. } 35 =$
$63 = 7 \times .;$	$1/7 \text{ v. } 63 =$	$14 = 7 \times .;$	$1/7 \text{ v. } 14 =$
$28 = 7 \times .;$	$1/7 \text{ v. } 28 =$	$56 = 7 \times .;$	$1/7 \text{ v. } 56 =$



## — 10. —

$\frac{1}{2}$ v. 18 =	$\frac{1}{6}$ v. 42 =	$\frac{1}{3}$ v. 24 =	$\frac{1}{7}$ v. 28 =	$\frac{1}{2}$ v. 16 =
$\frac{1}{3}$ v. 18 =	$\frac{1}{7}$ v. 42 =	$\frac{1}{7}$ v. 63 =	$\frac{1}{7}$ v. 35 =	$\frac{1}{4}$ v. 16 =
$\frac{1}{4}$ v. 20 =	$\frac{1}{7}$ v. 49 =	$\frac{1}{5}$ v. 45 =	$\frac{1}{4}$ v. 32 =	$\frac{1}{5}$ v. 30 =
$\frac{1}{5}$ v. 20 =	$\frac{1}{7}$ v. 21 =	$\frac{1}{6}$ v. 54 =	$\frac{1}{7}$ v. 56 =	$\frac{1}{7}$ v. 14 =

## — 11. —

$\frac{1}{2}$ v. 20 =	$\frac{1}{3}$ v. 69 =	$\frac{1}{2}$ v. 26 =
$\frac{1}{2}$ v. 40 =	$\frac{1}{3}$ v. 60 = 20	$\frac{1}{2}$ v. 46 =
$\frac{1}{2}$ v. 60 =	$\frac{1}{3}$ v. 9 = 3	$\frac{1}{2}$ v. 68 =
$\frac{1}{3}$ v. 30 =		$\frac{1}{3}$ v. 39 =
$\frac{1}{3}$ v. 60 =	$\frac{1}{3}$ v. 69 = 23	$\frac{1}{4}$ v. 48 =

## — 12. —

$\frac{1}{5}$ v. 45 + 6 =	$\frac{1}{4}$ v. 20 + 5 =	$\frac{1}{2}$ v. 28 + 13 =
$\frac{1}{3}$ v. 27 - 7 =	$\frac{1}{7}$ v. 63 - 4 =	$\frac{1}{2}$ v. 64 - 18 =
$\frac{1}{7}$ v. 14 + 8 =	$\frac{1}{5}$ v. 30 + 3 =	$\frac{1}{3}$ v. 36 + 24 =
$\frac{1}{6}$ v. 54 - 9 =	$\frac{1}{7}$ v. 42 - 2 =	$\frac{1}{3}$ v. 66 - 21 =

## e. Anwendungen.

1. Wieviel Heller sind 6 Zehnhellerstücke und 7 h? — Wieviel Zehnhellerstücke und Heller sind a) 63 h? b) 68 h?

2. Wieviel Tage sind 2, 3, 4, . . . 10 Wochen?

3. Wieviel Wochen sind 14, 15, 21, 49, 35, 42 Tage?

4. Wieviel Bogen sind 6 Lagen 5 Bogen Schreibpapier?

5. Der Monat April hat 30, Mai 31 Tage; wieviel Tage haben beide Monate zusammen?

6. In einer Schule sind 40 Knaben und 30 Mädchen; wieviel Kinder sind es?

7. Gustav schenkt seiner Schwester 20 Kirschen, es bleiben ihm noch 48 Kirschen; wieviel Kirschen hatte er früher?

8. Von 65 Schülern fehlen heute 5 Schüler; wie viele sind da?

9. Jemand verdient an jedem Arbeitstage der Woche 11 Zwanzighellerstücke und braucht jeden Wochentag 8 Zwanzighellerstücke; wieviel bleibt ihm wöchentlicher übrig?

10. 1 kg gedörrte Pflaumen kostet 4 Zehnhellerstücke; wieviel kosten 7 kg?

11. Jemand braucht täglich 3 K 8 h; wieviel in 1 Woche?

12. In einem Hause braucht man jede Woche 2 kg Zucker; wieviel in 56 Tagen?

13. Wieviel Bleistifte erhält man für 42 h, wenn 1 Bleistift 7 h kostet?

14. Jemand hat 70 K in Goldmünzen zu 10 K; wieviel Stücke sind es?

15. 63 Schüler einer Classe sitzen in 7 Bänken u. zw. in jeder Bank gleich viele; wie viele sitzen in 1 Bank, wie viele in 3, 5, 2, 6, 4 Bänken?

16. Unter 7 Arme werden 28 K vertheilt; wieviel erhält jeder?

17. 56 Kohlpflanzen sollen in 7 gleichen Reihen gepflanzt werden; wieviel Stück kommen in 1 Reihe?

18. Von 68 K bezahlt jemand die Hälfte; wieviel bleibt er noch schuldig?

## 8. Rechnungsübungen im Zahlenraume bis achtzig.

a. Zu- und Wegzählen.

— 1. —

Rechne die Reihen:

1. $2 + 8$	4. $7 + 8$	10. $79 - 8$	13. $75 - 8$
$2 + 8 = 10$	5. $8 + 8$	$79 - 8 = 71$	14. $77 - 8$
$10 + 8 = 18$	6. $1 + 9$	$71 - 8 = 63$	15. $80 - 9$
bis 74.	7. $5 + 9$	bis 7.	16. $73 - 9$
2. $3 + 8$	8. $4 + 9$	11. $76 - 8$	17. $78 - 9$
3. $5 + 8$	9. $9 + 9$	12. $80 - 8$	18. $74 - 9$

— 2. —

$70 + 10 =$	$67 + 10 =$	$24 + 50 =$	$63 + 14 =$	$17 + 63 =$
$50 + 20 =$	$56 + 20 =$	$13 + 60 =$	$68 + 11 =$	$26 + 48 =$
$50 + 30 =$	$45 + 30 =$	$31 + 40 =$	$54 + 23 =$	$35 + 37 =$
$40 + 40 =$	$41 + 30 =$	$57 + 20 =$	$42 + 36 =$	$44 + 29 =$

— 3. —

$80 - 10 =$	$73 - 10 =$	$74 - 30 =$	$73 - 12 =$	$71 - 27 =$
$70 - 20 =$	$79 - 20 =$	$78 - 10 =$	$78 - 17 =$	$72 - 36 =$
$70 - 30 =$	$72 - 20 =$	$71 - 50 =$	$74 - 23 =$	$79 - 49 =$
$80 - 20 =$	$76 - 30 =$	$75 - 40 =$	$77 - 54 =$	$74 - 65 =$

## - 4. -

$66 + . = 74$	$68 + . = 72$	$65 + . = 73$	$30 + . = 80$
$72 + . = 80$	$76 + . = 79$	$69 + . = 76$	$50 + . = 80$
$68 + . = 75$	$72 + . = 78$	$64 + . = 70$	$40 + . = 70$
$67 + . = 71$	$74 + . = 77$	$62 + . = 71$	$50 + . = 60$

## b. Vielfachen von 8 und mit 8.

1 . . . . . 8	$1 \times 8 =$	$8 \times 1 =$
2 . . . . . 16	$2 \times 8 =$	$8 \times 2 =$
3 . . . . . 24	$3 \times 8 =$	$8 \times 3 =$

## u. f. w.

## - 5. -

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

## - 6. -

$3 \times 4 + . = 18$	$2 \times 9 + . = 21$	$5 \times 7 + . = 41$
$6 \times 5 + . = 35$	$6 \times 6 + . = 43$	$8 \times 2 + . = 23$
$5 \times 3 + . = 19$	$4 \times 7 + . = 35$	$6 \times 9 + . = 62$
$4 \times 8 + . = 37$	$9 \times 3 + . = 32$	$9 \times 5 + . = 50$
$7 \times 9 + . = 64$	$3 \times 6 + . = 24$	$7 \times 8 + . = 63$
$5 \times 5 + . = 27$	$8 \times 7 + . = 64$	$8 \times 6 + . = 55$

## - 7. -

$2 \times 20 =$	$2 \times 11 =$	$3 \times 12 =$	$4 \times 14 =$	$5 \times 12 =$
$3 \times 20 =$	$2 \times 13 =$	$3 \times 18 =$	$4 \times 11 =$	$5 \times 15 =$
$4 \times 20 =$	$2 \times 27 =$	$3 \times 21 =$	$4 \times 19 =$	$6 \times 11 =$
$2 \times 40 =$	$2 \times 38 =$	$3 \times 25 =$	$4 \times 16 =$	$6 \times 12 =$

## c. Messen durch 8.

$24 = . \times 8; 8 \text{ in } 24 =$	$72 = . \times 8; 8 \text{ in } 72 =$
$56 = . \times 8; 8 \text{ in } 56 =$	$32 = . \times 8; 8 \text{ in } 32 =$
$16 = . \times 8; 8 \text{ in } 16 =$	$8 = . \times 8; 8 \text{ in } 8 =$
$80 = . \times 8; 8 \text{ in } 80 =$	$64 = . \times 8; 8 \text{ in } 64 =$
$48 = . \times 8; 8 \text{ in } 48 =$	$40 = . \times 8; 8 \text{ in } 40 =$

## — 8. —

Wieoft ist enthalten :

5 in 32, 10, 44, 12, 37, 9, 24, 30, 43, 26 ?

6 in 14, 48, 23, 51, 33, 18, 56, 8, 25, 39 ?

3 in 17, 25, 15, 8, 11, 26, 18, 12, 7, 27 ?

7 in 59, 9, 49, 36, 25, 63, 19, 31, 44, 38 ?

4 in 20, 13, 35, 5, 26, 17, 32, 15, 23, 39 ?

8 in 55, 74, 24, 30, 77, 43, 65, 19, 37, 56 ?

## — 9. —

2 in 26 =	2 in 34 =	2 in 30 =	3 in 72 =
2 in 44 =	2 in 20 = 10	2 in 70 =	4 in 56 =
2 in 64 =	2 in 14 = 7	2 in 38 =	4 in 60 =
2 in 66 =	2 in 34 = 17	2 in 76 =	5 in 65 =
2 in 48 =		3 in 45 =	6 in 78 =

d. Theilen durch 8.

48 = 8 × . ; 1/8 v. 48 =	56 = 8 × . ; 1/8 v. 56 =
16 = 8 × . ; 1/8 v. 16 =	24 = 8 × . ; 1/8 v. 24 =
64 = 8 × . ; 1/8 v. 64 =	8 = 8 × . ; 1/8 v. 8 =
80 = 8 × . ; 1/8 v. 80 =	40 = 8 × . ; 1/8 v. 40 =
32 = 8 × . ; 1/8 v. 32 =	72 = 8 × . ; 1/8 v. 72 =

## — 10. —

1/4 v. 12 =	1/8 v. 24 =	1/7 v. 21 =	1/8 v. 72 + 5 =
1/7 v. 35 =	1/5 v. 25 =	1/6 v. 36 =	1/2 v. 18 - 5 =
1/3 v. 18 =	1/5 v. 40 =	1/8 v. 16 =	1/8 v. 32 + 6 =
1/8 v. 56 =	1/2 v. 14 =	1/8 v. 72 =	1/5 v. 45 - 6 =
1/6 v. 48 =	1/8 v. 64 =	1/4 v. 28 =	1/6 v. 18 + 7 =

## — 11. —

1/3 v. 72 =	1/2 v. 34 =	1/3 v. 48 =	1/4 v. 52 =
1/3 v. 60 = 20	1/2 v. 38 =	1/3 v. 54 =	1/4 v. 76 =
1/3 v. 12 = 4	1/2 v. 56 =	1/3 v. 75 =	1/5 v. 70 =
1/3 v. 72 = 24	1/2 v. 78 =	1/3 v. 78 =	1/6 v. 72 =

## — 12. —

1/5 v. 40 - 3 =	1/4 v. 12 + 5 =	1/3 v. 27 - 7 =
1/8 v. 16 + 4 =	1/7 v. 42 - 4 =	1/5 v. 20 + 5 =
1/3 v. 24 - 5 =	1/8 v. 32 + 7 =	1/7 v. 63 - 3 =
1/6 v. 36 + 6 =	1/2 v. 18 - 8 =	1/8 v. 32 + 1 =

## e. Anwendungen.

1. Wieviel Heller sind 7 Zehnhellerstücke und 2 h? — Wieviel Zehnhellerstücke und Heller sind 75 h?
  2. Wieviel Heller sind 4 Zwanzighellerstücke? 3 Zehnhellerstücke und 3 Zweihellerstücke?
  3. Wieviel *g* sind 3, 5, 7, 8 *dkg*?
  4. Wieviel Stunden sind 2, 3 Tage?
  5. Wieviel Monate sind 2, 3, 4, 5, 6 Jahre?
- 
6. Von zwei Kisten wiegt die eine 40 *kg*, die andere 35 *kg*; wieviel wiegen beide zusammen?
  7. In einem Spitale, das für 80 Kranke eingerichtet ist, sind 56 Kranke; wieviel Kranke können noch aufgenommen werden?
  8. Von 75 Schülern sind nur 58 anwesend; wie viele fehlen?
  9. Jemand ist 5 K 78 h schuldig, er bezahlt davon 3 K 60 h; wieviel bleibt er noch schuldig?
  10. 1 Regenschirm kostet 7 K; wieviel kosten 2, 5, 6, 9 Schirme?
  11. 1 Paar Schuhe kostet 8 K; wieviel kosten 2, 5, 8, 3, 7 Paar?
  12. Für 1 K erhält man 8 Stück Hefte; wieviel für 10, 7, 4, 9 K?
  13. Wieviel *m* Band erhält man für 72 h, wenn 1 *m* 8 h kostet?
  14. Wieviel Reihen bilden 48 Bäume, wenn in jeder Reihe 8 Bäume stehen?
  15. In einem Walde sollen 72 Bäume gefällt werden; in wieviel Tagen werden 2 Holzhauer damit fertig, wenn jeder täglich 3 Bäume fällt?
  16. Der Vater kauft 8 *m* Tuch auf Winterkleider und zahlt dafür 64 K; wie theuer wurde 1 *m* gerechnet?
  17. 4 Sprachbücher kosten 64 h, wie hoch kommt 1 Sprachbuch; wieviel kosten 2, 3, 5 Sprachbücher?

## 9. Rechnungsübungen im Zahlenraume bis neunzig.

a. Zu- und Wegzählen.

-- 1. --

Rechne die Reihen:

1. $1 + 7$	5. $2 + 9$	9. $90 - 7$	13. $90 - 9$
2. $6 + 7$	6. $4 + 9$	10. $83 - 7$	14. $88 - 9$
3. $1 + 8$	7. $5 + 9$	11. $89 - 8$	15. $85 - 9$
4. $4 + 8$	8. $7 + 9$	12. $86 - 8$	16. $84 - 9$

-- 2. --

$80 + 10 =$	$71 + 10 =$	$42 + 40 =$	$73 + 16 =$	$26 + 64 =$
$70 + 20 =$	$65 + 20 =$	$27 + 50 =$	$65 + 23 =$	$57 + 28 =$
$60 + 20 =$	$69 + 20 =$	$34 + 50 =$	$52 + 37 =$	$38 + 46 =$
$50 + 40 =$	$54 + 30 =$	$26 + 60 =$	$41 + 45 =$	$67 + 19 =$

-- 3. --

$90 - 10 =$	$83 - 10 =$	$88 - 40 =$	$84 - 12 =$	$81 - 11 =$
$80 - 10 =$	$86 - 20 =$	$81 - 40 =$	$89 - 27 =$	$84 - 25 =$
$90 - 20 =$	$89 - 20 =$	$85 - 50 =$	$86 - 34 =$	$82 - 37 =$
$80 - 50 =$	$82 - 30 =$	$87 - 60 =$	$88 - 46 =$	$85 - 58 =$

-- 4. --

$83 + . = 87$	$78 + . = 81$	$63 + . = 66$	$80 + . = 90$
$74 + . = 79$	$75 + . = 82$	$75 + . = 78$	$60 + . = 80$
$82 + . = 84$	$67 + . = 73$	$86 + . = 87$	$70 + . = 90$
$81 + . = 87$	$59 + . = 67$	$68 + . = 75$	$50 + . = 80$

b. Vervielfachen von 9 und mit 9.

1 . . . . . 9	$1 \times 9 =$	$9 \times 1 =$
2 . . . . . 18	$2 \times 9 =$	$9 \times 2 =$
3 . . . . . 27	$3 \times 9 =$	$9 \times 3 =$

u. f. w.

-- 5. --

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

## - 6. -

$6 \times 9 + . = 57$	$3 \times 8 + . = 32$	$9 \times 7 + . = 71$
$5 \times 7 + . = 39$	$4 \times 9 + . = 41$	$5 \times 3 + . = 23$
$7 \times 9 + . = 68$	$7 \times 7 + . = 50$	$4 \times 7 + . = 34$
$3 \times 8 + . = 27$	$9 \times 3 + . = 35$	$7 \times 8 + . = 62$

## - 7. -

$2 \times 30 =$	$2 \times 12 =$	$6 \times 12 =$	$3 \times 13 =$	$5 \times 18 =$
$2 \times 40 =$	$3 \times 12 =$	$7 \times 12 =$	$3 \times 24 =$	$6 \times 15 =$
$3 \times 20 =$	$4 \times 12 =$	$2 \times 14 =$	$4 \times 17 =$	$6 \times 14 =$
$3 \times 30 =$	$5 \times 12 =$	$5 \times 14 =$	$4 \times 21 =$	$8 \times 11 =$

## c. Messen durch 9.

$72 = . \times 9; \mathbf{9}$ in $\mathbf{72} =$	$27 = . \times 9; \mathbf{9}$ in $\mathbf{27} =$
$18 = . \times 9; \mathbf{9}$ in $\mathbf{18} =$	$90 = . \times 9; \mathbf{9}$ in $\mathbf{90} =$
$63 = . \times 9; \mathbf{9}$ in $\mathbf{63} =$	$9 = . \times 9; \mathbf{9}$ in $\mathbf{9} =$
$36 = . \times 9; \mathbf{9}$ in $\mathbf{36} =$	$45 = . \times 9; \mathbf{9}$ in $\mathbf{45} =$
$81 = . \times 9; \mathbf{9}$ in $\mathbf{81} =$	$54 = . \times 9; \mathbf{9}$ in $\mathbf{54} =$

## - 8. -

Wie oft ist enthalten:

8 in 46, 14, 24, 71, 55, 64, 30, 52, 63, 72?

5 in 29, 10, 19, 38, 40, 27, 35, 42, 36, 25?

9 in 55, 90, 79, 21, 54, 48, 26, 69, 45, 84?

7 in 64, 35, 15, 23, 67, 56, 27, 46, 52, 63?

4 in 16, 29, 7, 35, 21, 26, 12, 17, 34, 28?

6 in 18, 9, 38, 25, 40, 54, 36, 22, 53, 31?

## - 9. -

$2$ in $28 =$	$3$ in $36 =$	$2$ in $36 =$	$3$ in $45 =$	$4$ in $64 =$
$2$ in $44 =$	$3$ in $69 =$	$2$ in $52 =$	$3$ in $57 =$	$5$ in $85 =$
$2$ in $62 =$	$4$ in $84 =$	$2$ in $74 =$	$3$ in $78 =$	$3$ in $90 =$
$2$ in $86 =$	$5$ in $55 =$	$2$ in $90 =$	$3$ in $81 =$	$7$ in $84 =$

## d. Theilen durch 9.

$45 = 9 \times .; \frac{1}{9}$ v. $\mathbf{45} =$	$18 = 9 \times .; \frac{1}{9}$ v. $\mathbf{18} =$
$54 = 9 \times .; \frac{1}{9}$ v. $\mathbf{54} =$	$81 = 9 \times .; \frac{1}{9}$ v. $\mathbf{81} =$
$36 = 9 \times .; \frac{1}{9}$ v. $\mathbf{36} =$	$9 = 9 \times .; \frac{1}{9}$ v. $\mathbf{9} =$
$63 = 9 \times .; \frac{1}{9}$ v. $\mathbf{63} =$	$27 = 9 \times .; \frac{1}{9}$ v. $\mathbf{27} =$
$90 = 9 \times .; \frac{1}{9}$ v. $\mathbf{90} =$	$72 = 9 \times .; \frac{1}{9}$ v. $\mathbf{72} =$

## — 10. —

$\frac{1}{2}$ v. 16 =	$\frac{1}{5}$ v. 35 =	$\frac{1}{8}$ v. 40 =	$\frac{1}{3}$ v. 24 + 5 =
$\frac{1}{3}$ v. 24 =	$\frac{1}{6}$ v. 42 =	$\frac{1}{9}$ v. 36 =	$\frac{1}{7}$ v. 56 - 7 =
$\frac{1}{3}$ v. 15 =	$\frac{1}{6}$ v. 30 =	$\frac{1}{9}$ v. 45 =	$\frac{1}{8}$ v. 32 + 9 =
$\frac{1}{4}$ v. 32 =	$\frac{1}{7}$ v. 28 =	$\frac{1}{9}$ v. 72 =	$\frac{1}{9}$ v. 54 - 3 =
$\frac{1}{4}$ v. 12 =	$\frac{1}{7}$ v. 49 =	$\frac{1}{9}$ v. 27 =	$\frac{1}{9}$ v. 18 + 6 =
$\frac{1}{5}$ v. 20 =	$\frac{1}{8}$ v. 56 =	$\frac{1}{9}$ v. 63 =	$\frac{1}{2}$ v. 16 - 8 =

## e. Anwendungen.

1. Wieviel Heller sind 9 Zehnhellerstücke? 8 Zehnhellerstücke und 7 Heller? — Wieviel Zehnhellerstücke und Heller sind 83, 88, 90 Heller?
  2. Wieviel *dm* sind 8 *m* und 5 *dm*?
  3. Um wieviel sind 85 Minuten mehr als 1 Stunde?
  4. Wieviel Bogen sind 3, 5, 7, 9 Lagen Papier?
- 
5. Ein Landmann verkauft 36 *hl* Weizen und 48 *hl* Roggen; wieviel *hl* Getreide sind es?
  6. Ein Greis ist gegenwärtig 82 Jahre alt; wie alt war er vor 50 Jahren?
  7. Jemand hatte zwei Fässer Bier; in dem einen sind 82 *l*, in dem andern 16 *l* weniger; wieviel *l* sind in dem zweiten Fasse?
  8. 1 *l* Bohnen kostet 22 *h*; wieviel kosten 4 *l*?
  9. 1 *hl* Mais kostet 10 *K*; wieviel kosten 5, 8, 9 *hl*?
  10. Für 1 Zehnhellerstück erhält man 9 Birnen; wieviel für 3, 10, 7, 5 Zehnhellerstücke?
  11. Für 1 Paar Strümpfe braucht man 9 *kg* Wolle; wieviel für 2, 5, 6, 9, 4 Paare?
  12. Wieviel Bäume sind in 9 Reihen, wenn in jeder Reihe 9 Bäume stehen?
  13. Jemand braucht monatlich 32 *K* für die Kost; wieviel in 2, 3, 4 Monaten?
  14. Ein Paar Hühner kostet 9 Zehnhellerstücke; wie viele Paare erhält man für 72 Zehnhellerstücke?
  15. Auf einer Strecke von 84 *m* sollen Bäume so gepflanzt werden, daß jeder 7 *m* von dem andern absteht; wieviel Bäume müssen gepflanzt werden?
  16. Eine Kuh braucht in 9 Tagen 90 *kg* Heu; wieviel täglich?



17. Wenn man für 12 K 72 h 3 m Tuch erhält; wie hoch kommt 1 m?

18. Eine Blechkanne wiegt allein 2 kg, mit Rüböl gefüllt 11 kg; wenn man für das Öl 81 Zehnellerstücke zahlen mußte, wieviel Zehnellerstücke kostete 1 kg?

19. Ein erwachsener Mensch hat in beiden Kiefern 32 Zähne; wieviel in einem Kiefer? — Der 4. Theil der Zähne besteht aus Schneidezähnen, der 8. Theil aus Eckzähnen; wieviel Schneide- und Eckzähne hat der Mensch im ganzen, wieviel in jedem Kiefer?

## 10. Rechnungsübungen im Zahlenraume bis hundert.

a. Zu- und Wegzählen.

— 1. —

Rechne die Reihen:

1. 1 + 2	7. 2 + 6	13. 100 - 2	19. 96 - 6
2. 2 + 3	8. 3 + 7	14. 98 - 3	20. 95 - 6
3. 1 + 4	9. 4 + 8	15. 99 - 4	21. 90 - 7
4. 3 + 4	10. 2 + 8	16. 98 - 4	22. 94 - 8
5. 2 + 5	11. 5 + 9	17. 97 - 5	23. 100 - 9
6. 4 + 5	12. 7 + 9	18. 94 - 5	24. 92 - 9

— 2. —

90 + 10 =	49 + 10 =	67 + 30 =	36 + 12 =	35 + 18 =
50 + 30 =	17 + 20 =	15 + 50 =	54 + 14 =	28 + 32 =
70 + 20 =	25 + 30 =	29 + 60 =	23 + 25 =	74 + 19 =
40 + 50 =	57 + 20 =	46 + 30 =	23 + 61 =	55 + 45 =
20 + 80 =	51 + 40 =	78 + 20 =	45 + 32 =	24 + 37 =

— 3. —

100 - 10 =	98 - 10 =	83 - 50 =	89 - 15 =	34 - 15 =
40 - 20 =	36 - 20 =	59 - 30 =	35 - 13 =	73 - 18 =
70 - 40 =	86 - 40 =	92 - 70 =	62 - 21 =	52 - 26 =
90 - 50 =	77 - 50 =	81 - 60 =	76 - 42 =	93 - 47 =
80 - 60 =	43 - 30 =	68 - 40 =	57 - 36 =	65 - 39 =

— 4. —

41 + . = 47	27 + . = 32	50 + . = 80	67 + . = 98
53 + . = 56	69 + . = 71	70 + . = 100	51 + . = 85
22 + . = 28	45 + . = 53	68 + . = 88	45 + . = 68
75 + . = 77	76 + . = 84	37 + . = 77	11 + . = 99
86 + . = 89	34 + . = 43	25 + . = 75	56 + . = 71

## — 5. —

Wieviel muß man zu jeder der folgenden Zahlen zählen, um 100 zu erhalten?

- 45, 27, 81, 30, 52, 64, 73, 19, 50, 63;  
 14, 91, 76, 58, 80, 47, 17, 24, 61, 40;  
 72, 46, 90, 56, 44, 85, 13, 78, 22, 67;  
 31, 48, 11, 29, 84, 66, 32, 70, 59, 51;  
 79, 20, 86, 34, 28, 74, 43, 65, 33, 75;  
 35, 83, 15, 60, 57, 42, 10, 71, 39, 26.

## b. Vervielfältigen.

1 . . . . . 10     $1 \times 10 = 10 \times 1 =$   
 2 . . . . . 20     $2 \times 10 = 10 \times 2 =$   
 u. f. w.

## — 6. —

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

## — 7. —

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

## - 8. -

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

## - 9. -

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

## - 10. -

$2 \times 20 =$	$2 \times 11 =$	$2 \times 12 =$	$2 \times 13 =$	$2 \times 28 =$
$3 \times 20 =$	$4 \times 11 =$	$5 \times 12 =$	$6 \times 16 =$	$3 \times 25 =$
$5 \times 20 =$	$7 \times 11 =$	$3 \times 12 =$	$4 \times 19 =$	$3 \times 29 =$
$3 \times 30 =$	$9 \times 11 =$	$6 \times 12 =$	$3 \times 15 =$	$4 \times 21 =$
$2 \times 40 =$	$6 \times 11 =$	$4 \times 12 =$	$5 \times 18 =$	$2 \times 36 =$
$2 \times 50 =$	$8 \times 11 =$	$7 \times 12 =$	$4 \times 25 =$	$3 \times 31 =$

## - 11. -

$4 \times 6 + 2 =$	$3 \times 7 + . = 24$	$6 \times 3 + . = 20$
$5 \times 8 + 3 =$	$5 \times 4 + . = 29$	$2 \times 8 + . = 23$
$8 \times 3 + 4 =$	$7 \times 9 + . = 65$	$4 \times 7 + . = 35$
$3 \times 9 + 5 =$	$6 \times 7 + . = 48$	$8 \times 6 + . = 54$
$4 \times 4 + 6 =$	$4 \times 8 + . = 33$	$3 \times 5 + . = 22$
$7 \times 8 + 7 =$	$9 \times 5 + . = 47$	$4 \times 9 + . = 41$

## c. Messen.

10 in 40 =	10 in 30 =	10 in 50 =	10 in 20 =	10 in 10 =
10 in 60 =	10 in 70 =	10 in 100 =	10 in 80 =	10 in 90 =

## - 12. -

Wie oft ist enthalten:

2 in 10,	11,	12,	13,	...	18,	19,	20?
3 in den	Zahlen von 10 bis 30?						
4 " "	"	"	"	20	"	40?	
5 " "	"	"	"	30	"	50?	
6 " "	"	"	"	40	"	60?	
7 " "	"	"	"	50	"	70?	
8 " "	"	"	"	60	"	80?	
9 " "	"	"	"	70	"	90?	
10 " "	"	"	"	80	"	100?	

## - 13. -

2 in 40 =	2 in 24 =	3 in 69 =	2 in 34 =	4 in 56 =
2 in 60 =	2 in 46 =	3 in 93 =	2 in 78 =	4 in 92 =
2 in 100 =	2 in 68 =	4 in 48 =	2 in 92 =	5 in 65 =
3 in 90 =	2 in 26 =	4 in 88 =	3 in 42 =	6 in 78 =
4 in 80 =	2 in 82 =	4 in 84 =	3 in 84 =	8 in 96 =

## d. Theilen.

$\frac{1}{10}$ v. 30 =	$\frac{1}{10}$ v. 100 =	$\frac{1}{10}$ v. 20 =	$\frac{1}{10}$ v. 80 =	$\frac{1}{10}$ v. 10 =
$\frac{1}{10}$ v. 70 =	$\frac{1}{10}$ v. 60 =	$\frac{1}{10}$ v. 40 =	$\frac{1}{10}$ v. 50 =	$\frac{1}{10}$ v. 90 =

## - 14. -

$\frac{1}{2}$ v. 10 =	$\frac{1}{8}$ v. 56 =	$\frac{1}{5}$ v. 30 =	$\frac{1}{10}$ v. 70 =
$\frac{1}{3}$ v. 27 =	$\frac{1}{9}$ v. 72 =	$\frac{1}{2}$ v. 16 =	$\frac{1}{6}$ v. 54 =
$\frac{1}{4}$ v. 28 =	$\frac{1}{10}$ v. 80 =	$\frac{1}{4}$ v. 36 =	$\frac{1}{10}$ v. 20 =
$\frac{1}{5}$ v. 35 =	$\frac{1}{3}$ v. 18 =	$\frac{1}{10}$ v. 50 =	$\frac{1}{2}$ v. 8 =
$\frac{1}{6}$ v. 48 =	$\frac{1}{6}$ v. 12 =	$\frac{1}{8}$ v. 64 =	$\frac{1}{5}$ v. 45 =
$\frac{1}{7}$ v. 21 =	$\frac{1}{10}$ v. 40 =	$\frac{1}{7}$ v. 63 =	$\frac{1}{4}$ v. 32 =

## - 15. -

$\frac{1}{2}$ v. 40 =	$\frac{1}{2}$ v. 28 =	$\frac{1}{3}$ v. 63 =	$\frac{1}{2}$ v. 32 =
$\frac{1}{2}$ v. 80 =	$\frac{1}{2}$ v. 42 =	$\frac{1}{3}$ v. 96 =	$\frac{1}{2}$ v. 78 =
$\frac{1}{3}$ v. 60 =	$\frac{1}{2}$ v. 64 =	$\frac{1}{4}$ v. 48 =	$\frac{1}{3}$ v. 45 =
$\frac{1}{4}$ v. 80 =	$\frac{1}{2}$ v. 86 =	$\frac{1}{4}$ v. 84 =	$\frac{1}{4}$ v. 52 =
$\frac{1}{5}$ v. 100 =	$\frac{1}{2}$ v. 82 =	$\frac{1}{4}$ v. 88 =	$\frac{1}{5}$ v. 75 =

## — 16. —

$\frac{1}{2}$ v. 16 + 5 =	$\frac{1}{4}$ v. 20 + 6 =	$\frac{1}{2}$ v. 24 + 13 =
$\frac{1}{3}$ v. 27 - 3 =	$\frac{1}{7}$ v. 63 - 7 =	$\frac{1}{3}$ v. 78 - 17 =
$\frac{1}{5}$ v. 40 + 6 =	$\frac{1}{8}$ v. 32 + 9 =	$\frac{1}{4}$ v. 96 + 15 =
$\frac{1}{6}$ v. 48 - 4 =	$\frac{1}{3}$ v. 24 - 2 =	$\frac{1}{5}$ v. 85 - 14 =

## e. Anwendungen.

1. Wieviel Heller sind 2, 3, 4, . . . 9, 10 Zehnhellerstücke? —  
Wieviel Zehnhellerstücke sind 10, 30, 60, 90, 40, 80 h?

2. Wieviel Heller sind a) 3 Zehnhellerstücke 7 h? b) 8 Zehnhellerstücke 1 h?

3. Wieviel Zehnhellerstücke und Heller sind 35, 57, 88, 94, 46, 25, 80, 17, 48, 62 h?

4. Wieviel Zehnhellerstücke sind 2, 3, 4, . . . 10 Kronen? —  
Wieviel Kronen sind 10, 40, 70, 30, 80, 50 Zehnhellerstücke?

5. Wieviel Zehnhellerstücke sind a) 4 Kronen 5 Zehnhellerstücke?  
b) 7 Kronen 3 Zehnhellerstücke?

6. Wieviel Kronen und Heller sind 16, 53, 26, 72, 61, 19, 60, 14, 58, 45, 22 Zehnhellerstücke?

7. Wieviel Zwanzighellerstücke sind 2, 3, 4, . . . 10, 12, 18, 20 K? — Wieviel Kronen sind 10, 30, 45, 80, 84, 92 Zwanzighellerstücke?

8. Wieviel *dm* sind 2, 3, 4, . . . 9 *m*? 7 *m* 3 *dm*?

9. " *m* sind 10, 40, 70, 30, 90 *dm*?

10. " *m* und *dm* sind 82 *dm*?

11. " *cm* sind 3, 8, 2, 5, 9, 4 *dm*?

12. " *dm* sind 10, 40, 90, 53 *cm*?

13. " *dl* sind 2, 3, 7, 5, 9 *l*?

14. " *l* sind 40, 60, 27, 78 *dl*?

15. " *g* sind 2, 3, 9, 4, 6 *dkg*?

16. " *dkg* sind 20, 50, 37, 84 *g*?

17. " Monate sind 3, 7, 5, 8, 6 Jahre?

18. " Stunden sind 2, 3, 4 Tage?

19. " Stück sind 2, 4, 5, 7, 8 Duzend?

20. " Bogen sind 2, 3, 6, 9 Lagen Papier?

21. " Buch sind 3, 5, 7, 8 Riez Papier?

22. Eine Frau kauft für 56 h Kerzen und für 42 h Zucker; wieviel muß sie zusammen bezahlen?

23. Ein Dorf hat 78 Häuser, ein anderes 15 Häuser mehr; wieviel Häuser hat das zweite Dorf?

24. In einem Walde wurden 56 Eichen, 21 Buchen und 18 Tannen gefällt; wieviel Bäume waren es?

25. Zwei Kälber kosten zusammen 93 K, das eine kostet 48 K; wie theuer ist das zweite?

26. Ein Faß Öl wiegt 94 kg, das Faß allein 15 kg; wieviel kg Öl sind darin?

27. Jemand hat eine Krone, er gibt aus:

10, 30, 80, 50, 90, 40, 60, 20, 70 h;

28, 53, 17, 33, 55, 68, 82, 15, 92 h;

59, 24, 48, 76, 29, 62, 54, 45, 86 h;

wieviel Heller bleiben ihm noch übrig?

28. Jemand ist 1 K schuldig, er zahlt

43 (64, 88, 19, 67, 74, 59, 36) h;

wieviel bleibt er noch schuldig?

29. Adolf kauft ein Buch für 36 h, er zahlt eine Krone; wieviel h erhält er zurück?

30. Von 1 hl Bier werden

64 (81, 54, 39, 45, 27, 73, 15) l

ausgeschenkt; wieviel l bleiben noch übrig?

31. Von 100 kg Reis hat ein Kaufmann noch

12 (33, 56, 79, 48, 80, 63, 27) kg

vorrätzig; wieviel kg hat er verkauft?

32. A kauft ein Füllen für 88 K und verkauft es für 100 K; wieviel gewinnt er?

33. Eine Herde besteht aus 94 Schafen, davon wurden 15 verkauft; aus wieviel Schafen besteht noch die Herde?

34. Ein Gärtner verkaufte 45 junge Obstbäume und behielt noch 52; wieviel junge Obstbäume hatte er früher?

35. 1 Lage Papier kostet 10 Zweihellerstücke; wieviel kosten 2, 6, 7, 10 Lagen?

36. Wieviel kosten 7, 5, 3, 8 hl Gerste à 10 K?

37. " " 3, 8, 4, 10 Schreibhefte à 8 h?

38. Wieviel kosten 3 l Bier à 32 h?

39. " " 4 l Bohnen à 24 h?

40. " " 5 l Milch à 16 h?

41. Eine Magd erhält 1 K auf den Markt, sie kauft 2 kg Salz à 26 h und für 36 h Eier; wieviel Geld muß sie zurückbringen?

42. Jemand kauft 6 Stück Farben à 9 h und 6 Stück à 7 h; wieviel hat er dafür zu bezahlen?

43. Für 1 Pferd braucht man täglich 13 kg, für 1 Kuh 11 kg Heu; wieviel Heu braucht man täglich für 2 Pferde und 6 Kühe?

44. Jemand hat 8 Arbeiter und zahlt am Samstag jedem 9 K 12 h; wieviel zahlt er im ganzen?

45. 1 hl Mais kostet 10 K; wieviel hl erhält man für 60 K?

46. Wieviel Zehnkronenstücke braucht man, um 70 K zu zahlen?

47. Wieviel Brettchen von 5 cm Länge kann man aus einem 1 m langen Brette schneiden?

48. Längs einer Straße steht alle 10 m ein Straßenstein; wieviel solche Steine befinden sich auf einer Strecke von 80 m?

49. 10 m Tuch kosten 80 K; wieviel kostet 1 m?

50. Für 10 K erhält man 20 kg Reis; wieviel für 1 K?

51. Für 1 Zehnhellerstück erhält man 30 Nüsse; wieviel für 1 h?

52. In 10 gleichen Reihen stehen 90 Bäumchen; wieviel in 1 Reihe?

53. 1 hl Bier kostet 32 K 60 h; wieviel kosten 50, 25 l?

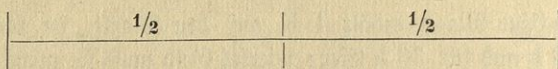
54. Ein Arbeiter zahlt jährlich 100 K Mietzins; wieviel für 4 Monate?

55. Eine Magd hat jährlich 84 K Lohn; wieviel bezieht sie in 2 Monaten?

56. Ein Knabe hatte 64 Stück Seidenraupen; der vierte Theil derselben hat sich bereits eingesponnen. Für wie viele Raupen muß der Knabe noch Futter holen?

## II. Elemente des Bruchrechnens.

### 1. Halbe.



Teilt man ein Ganzes in zwei gleiche Theile, so heißt jeder Theil die Hälfte des Ganzen oder ein Halbes ( $\frac{1}{2}$ ), 2 Halbe ( $\frac{2}{2}$ ) geben zusammen wieder 1 Ganzes.

1. Wieviel Halbe hat ein Ganzes?
2. „ Halbe sind 2, 3, 4, 8, 12, 25 Ganze?
3. „ Halbe sind  $1\frac{1}{2}$ ,  $2\frac{1}{2}$ ,  $5\frac{1}{2}$ ,  $14\frac{1}{2}$ ?
4. „ Ganze sind 2, 4, 6, 10, 26 Halbe?

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<p>5. <math>1 + \frac{1}{2} =</math>  <math>2 + 1\frac{1}{2} =</math>  <math>15 + 3\frac{1}{2} =</math></p>	<p>6. <math>\frac{1}{2} + 2 =</math>  <math>1\frac{1}{2} + 3 =</math>  <math>8\frac{1}{2} + 6 =</math></p>	<p>7. <math>\frac{1}{2} + \frac{1}{2} =</math>  <math>2\frac{1}{2} + \frac{1}{2} =</math>  <math>16\frac{1}{2} + 5\frac{1}{2} =</math></p>
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Rechne folgende Reihen bis 100 oder nahe an 100:

8. $90 + \frac{1}{2}$	9. $82\frac{1}{2} + 1\frac{1}{2}$	10. $37 + 5\frac{1}{2}$
11. $2\frac{1}{2} - \frac{1}{2} =$	12. $5\frac{1}{2} - 2 =$	13. $1 - \frac{1}{2} =$
$10\frac{1}{2} - 2\frac{1}{2} =$	$8\frac{1}{2} - 3 =$	$4 - 1\frac{1}{2} =$
$25\frac{1}{2} - 8\frac{1}{2} =$	$37\frac{1}{2} - 18 =$	$20 - 6\frac{1}{2} =$

Rechne folgende Reihen bis 0 oder nahe an 0:

14. $9\frac{1}{2} - \frac{1}{2}$	15. $23 - 1\frac{1}{2}$	16. $61\frac{1}{2} - 5\frac{1}{2}$
17. $2 \times \frac{1}{2} =$	18. $4 \times 1\frac{1}{2} =$	19. $10 \times 3\frac{1}{2} =$
$5 \times \frac{1}{2} =$	$9 \times 2\frac{1}{2} =$	$12 \times 7\frac{1}{2} =$

20. Wie oft ist 1 Halbes in 7 Halben enthalten?
21. Wie oft ist  $\frac{1}{2}$  in 1, 2, 3,  $5\frac{1}{2}$ ,  $17\frac{1}{2}$  enthalten?
22. Wieviel ist der 5te Theil von  $35\frac{1}{2}$ ?

23. Wieviel Heller ist  $\frac{1}{2}$  Krone?

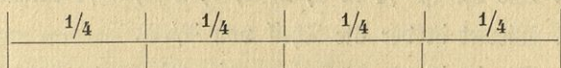
24. „ l ist  $\frac{1}{2}$  hl?

25. „ dkg ist  $\frac{1}{2}$  kg?



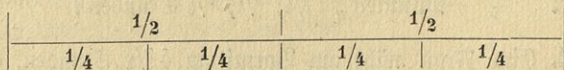
26. Wieviel Minuten ist  $\frac{1}{2}$  Stunde?  
 27. Wieviel Monate ist  $\frac{1}{2}$  Jahr?  
 28. Jemand kauft  $3\frac{1}{2}$  und  $1\frac{1}{2}$  Buch Papier; wieviel zusammen?  
 29. Von einem Stücke Tuch, das jetzt  $25\frac{1}{2} m$  enthält, wurden  $3\frac{1}{2} m$  auf einen Anzug abgeschnitten; wieviel  $m$  hatte das Stück ursprünglich?  
 30. Von 20  $kg$  einer Ware werden  $12\frac{1}{2} kg$  verkauft; wieviel bleibt übrig?  
 31. Ein Arbeiter verdient täglich  $1\frac{1}{2} K$ ; wieviel in 5 Tagen?

## 2. Viertel.



Theilt man ein Ganzes in vier gleiche Theile, so heißt jeder Theil ein Viertel ( $\frac{1}{4}$ ).

1. Wieviel Viertel hat 1 Ganzes?
2. „ Viertel sind 2, 4, 7, 12, 20 Ganze?
3. „ Viertel sind  $1\frac{1}{4}$ ,  $2\frac{1}{4}$ ,  $4\frac{3}{4}$ ,  $8\frac{2}{4}$ ,  $13\frac{1}{4}$ ?
4. „ Ganze sind 4, 8, 20, 36, 76 Viertel?



Theilt man ein Ganzes zuerst in 2 Halbe, und dann jedes Halbe wieder in 2 gleiche Theile, so erhält man auch Viertel.

5. Wieviel Viertel hat 1 Halbes?
6. „ Viertel sind  $\frac{2}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ ,  $\frac{13}{2}$ ,  $\frac{25}{2}$ ?
7. „ Halbe sind  $\frac{2}{4}$ ,  $\frac{6}{4}$ ,  $\frac{10}{4}$ ,  $\frac{34}{4}$ ,  $\frac{54}{4}$ ?

$8. \quad 1 + \frac{1}{4} =$ $3 + 1\frac{2}{4} =$ $17 + 4\frac{3}{4} =$	$9. \quad \frac{3}{4} + 2 =$ $5\frac{1}{4} + 6 =$ $28\frac{2}{4} + 3\frac{1}{4} =$	$10. \quad \frac{3}{4} + \frac{1}{4} =$ $8\frac{3}{4} + 2\frac{3}{4} =$ $31\frac{3}{4} + 12\frac{1}{2} =$
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Rechne folgende Reihen bis 100 oder nahe an 100:

11.  $97 + \frac{1}{4}$       12.  $89\frac{1}{4} + \frac{3}{4}$       13.  $51\frac{2}{4} + 4\frac{1}{4}$   
 14.  $8\frac{1}{4} - 3\frac{1}{4} =$       15.  $4 - \frac{1}{4} =$       16.  $9\frac{3}{4} - 5\frac{1}{4} =$   
 $7\frac{3}{4} - 4\frac{3}{4} =$        $12 - 3\frac{1}{4} =$        $26\frac{1}{4} - 8\frac{3}{4} =$   
 $12\frac{2}{4} - 5 =$        $37 - 20\frac{3}{4} =$        $44\frac{1}{2} - 12\frac{3}{4} =$

Rechne folgende Reihen bis 0 oder nahe an 0:

17.  $3 - \frac{1}{4}$       18.  $6 - \frac{3}{4}$       19.  $32\frac{1}{2} - 3\frac{1}{4}$   
 20.  $4 \times \frac{1}{4} =$       21.  $6 \times 3\frac{2}{4} =$       22.  $5 \times 8\frac{3}{4} =$   
 $3 \times 2\frac{1}{4} =$        $9 \times 5\frac{2}{4} =$        $7 \times 13\frac{3}{4} =$   
 $15 \times 4\frac{1}{4} =$        $12 \times 7\frac{2}{4} =$        $10 \times 9\frac{3}{4} =$

23. Wie oft ist 1 Viertel in 3 Vierteln enthalten?

24. Wie oft ist  $\frac{1}{4}$  in 1, 2, 4, 7,  $2\frac{1}{4}$ ,  $7\frac{3}{4}$  enthalten?

25. Wieviel ist der 6te Theil von  $\frac{30}{4}$ ?

26. Wieviel ist die Hälfte von  $\frac{6}{4}$ ,  $\frac{18}{4}$ ,  $2\frac{2}{4}$ ,  $19\frac{2}{4}$ ?

27. Wieviel Heller sind  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  Kronen?

28. „ *dkg* „  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  *kg*?

29. „ *l* „  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  *hl*?

30. „ Monate „  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  Jahre?

31. „ Minuten „  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  Stunden?

32. Eine Frau näht am Vormittag  $4\frac{3}{4}$  Stunden, am Nachmittag  $5\frac{1}{2}$  Stunden; wieviel Stunden zusammen?

33. Von 8 *m* Leinwand schneidet man  $3\frac{1}{4}$  *m* ab; wie lang ist das übrigbleibende Stück?

34. Eine Flasche enthält  $1\frac{1}{2}$  *l*, eine zweite Flasche  $\frac{3}{4}$  *l* Wein; wieviel Wein enthält die erste Flasche mehr als die zweite?

35. Jemand verkauft 9 *hl* Wein und gewinnt bei jedem *hl*  $5\frac{1}{4}$  K; wieviel gewinnt er im ganzen?

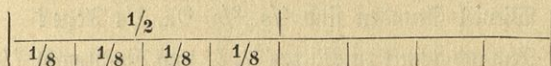
36. Ein Brunnen liefert in 1 Minute  $12\frac{1}{4}$  *l* Wasser; wieviel in 8 Minuten?

## 3. Achtel.



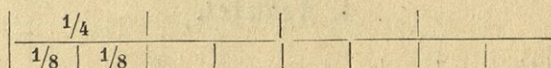
Theilt man ein Ganzes in 8 gleiche Theile, so ist ein solcher Theil ein Achtel ( $\frac{1}{8}$ ).

1. Wieviel Achtel hat ein Ganzes?
2. „ Achtel sind 2, 3, 5, 9, 12 Ganze?
3. „ Achtel sind  $1\frac{1}{8}$ ,  $2\frac{3}{8}$ ,  $5\frac{5}{8}$ ,  $8\frac{7}{8}$ ?
4. „ Ganze sind 8, 16, 32, 40, 72 Achtel?



Theilt man ein Ganzes zuerst in 2 Halbe, und dann jede Hälfte noch in 4 gleiche Theile, so erhält man auch Achtel.

5. Wieviel Achtel hat 1 Halbes?
6. „ Achtel sind  $\frac{2}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ ,  $\frac{17}{2}$ ,  $\frac{25}{2}$ ?
7. „ Halbe sind  $\frac{4}{8}$ ,  $\frac{12}{8}$ ,  $\frac{20}{8}$ ,  $\frac{32}{8}$ ,  $\frac{36}{8}$ ?



Theilt man ein Ganzes zuerst in 4 Viertel, und dann jedes Viertel noch in 2 gleiche Theile, so erhält man auch Achtel.

8. Wieviel Achtel hat 1 Viertel?
9. „ Achtel sind  $\frac{2}{4}$ ,  $\frac{6}{4}$ ,  $\frac{10}{4}$ ,  $\frac{26}{4}$ ,  $\frac{35}{4}$ ?
10. „ Viertel sind  $\frac{2}{8}$ ,  $\frac{4}{8}$ ,  $\frac{12}{8}$ ,  $\frac{28}{8}$ ,  $\frac{42}{8}$ ?

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$$11. \quad 1 + \frac{3}{8} = \quad 12. \quad \frac{5}{8} + \frac{3}{8} = \quad 13. \quad \frac{1}{2} + \frac{3}{8} =$$

$$\frac{35}{8} + 2 = \quad 18\frac{7}{8} + 9\frac{3}{8} = \quad 17\frac{7}{8} + 5\frac{1}{4} =$$

Rechne folgende Reihen bis 100 oder nahe an 100:

$$14. \quad 94 + \frac{3}{8} \quad 15. \quad 89\frac{1}{8} + 1\frac{5}{8} \quad 16. \quad 64\frac{1}{2} + 3\frac{7}{8}$$

$$17. \quad 1\frac{3}{8} - \frac{3}{8} = \quad 18. \quad 3 - \frac{5}{8} = \quad 19. \quad 9\frac{7}{8} - 4\frac{1}{2} =$$

$$12\frac{7}{8} - 8\frac{5}{8} = \quad 8\frac{3}{8} - 2\frac{7}{8} = \quad 15\frac{1}{4} - 8\frac{5}{8} =$$

Rechne folgende Reihen bis 0 oder nahe an 0:

$$20. \quad 3 - \frac{3}{8} \quad 21. \quad 11\frac{5}{8} - 1\frac{1}{8} \quad 22. \quad 42\frac{1}{2} - 4\frac{7}{8}$$

$$23. \quad 8 \times \frac{1}{8} = \quad 24. \quad 8 \times 5\frac{3}{8} = \quad 25. \quad 4 \times 18\frac{7}{8} =$$

$$7 \times 3\frac{1}{8} = \quad 12 \times 4\frac{5}{8} = \quad 8 \times 11\frac{5}{8} =$$

26. Wie oft ist 1 Achtel in 5 Achteln enthalten?

27. Wie oft ist  $\frac{1}{8}$  in 1, 2, 5,  $1\frac{3}{8}$ ,  $2\frac{1}{2}$ ,  $4\frac{3}{4}$  enthalten?

28. Wieviel ist die Hälfte von  $\frac{2}{8}$ ,  $\frac{14}{8}$ ,  $\frac{1}{4}$ ,  $6\frac{3}{4}$ ?

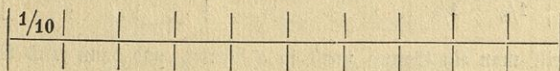
29. Wieviel Stunden sind  $\frac{1}{8}$ ,  $\frac{2}{8}$ ,  $\frac{3}{8}$ ,  $\frac{7}{8}$  Tage?

30. Jemand trinkt zu Mittag  $\frac{1}{4}$  l, zum Nachtmahl  $\frac{1}{8}$  l Wein; wieviel zusammen?

31. Karl ist  $8\frac{1}{8}$  Jahre alt, Eduard  $\frac{5}{8}$  Jahre jünger; wie alt ist Eduard?

32. Wieviel Wein enthalten 4 Flaschen, wenn jede  $1\frac{5}{8}$  l enthält?

#### 4. Zehntel.



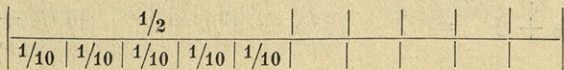
Theilt man ein Ganzes in 10 gleiche Theile, so ist ein solcher Theil ein Zehntel ( $\frac{1}{10}$ ).

1. Wieviel Zehntel hat 1 Ganzes?

2. „ Zehntel sind 2, 3, 8, 9 Ganze?

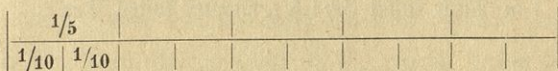
3. „ Zehntel sind  $1\frac{1}{10}$ ,  $2\frac{3}{10}$ ,  $5\frac{7}{10}$ ,  $8\frac{9}{10}$ ?

4. „ Ganze sind 10, 20, 40, 70 Zehntel?



Theilt man ein Ganzes zuerst in 2 Halbe, und dann jede Hälfte noch in 5 gleiche Theile, so erhält man auch Zehntel.

5. Wieviel Zehntel hat 1 Halbes?  
 6. „ Zehntel sind  $\frac{2}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ ,  $\frac{9}{2}$ ,  $\frac{17}{2}$ ?  
 7. „ Halbe sind  $\frac{5}{10}$ ,  $\frac{15}{10}$ ,  $\frac{35}{10}$ ,  $\frac{55}{10}$ ,  $9\frac{5}{10}$ ?



Theilt man ein Ganzes zuerst in 5 Fünftel und dann jedes Fünftel in 2 gleiche Theile, so erhält man auch Zehntel.

8. Wieviel Zehntel hat 1 Fünftel?  
 9. „ Zehntel sind  $\frac{2}{5}$ ,  $\frac{6}{5}$ ,  $\frac{12}{5}$ ,  $\frac{32}{5}$ ,  $\frac{26}{5}$ ?  
 10. „ Fünftel sind  $\frac{4}{10}$ ,  $\frac{12}{10}$ ,  $\frac{6}{10}$ ,  $\frac{24}{10}$ ,  $\frac{44}{10}$ ?

11.  $1 + \frac{1}{10} = 8\frac{7}{10} + 9 =$     12.  $\frac{4}{10} + \frac{3}{10} = 19\frac{9}{10} + 8\frac{5}{10} =$     13.  $\frac{7}{10} + \frac{1}{2} = 30\frac{1}{2} + 2\frac{9}{10} =$

Rechne folgende Reihen bis 100 oder nahe an 100:

14.  $89 + 1\frac{1}{10}$     15.  $47\frac{7}{10} + 5\frac{3}{10}$     16.  $69\frac{1}{2} + 3\frac{7}{10}$   
 17.  $3\frac{1}{10} - \frac{1}{10} = 8\frac{7}{10} - 5 =$     18.  $1 - \frac{3}{10} = 13 - 2\frac{9}{10} =$     19.  $15\frac{1}{10} - 6\frac{7}{10} = 18\frac{1}{2} - 7\frac{3}{10} =$

Rechne folgende Reihen bis 0 oder nahe an 0:

20.  $2 - \frac{3}{10}$     21.  $28 - 3\frac{7}{10}$     22.  $45\frac{1}{2} - 4\frac{9}{10}$   
 23.  $10 \times \frac{1}{10} = 8 \times 1\frac{3}{10} =$     24.  $5 \times 6\frac{7}{10} = 9 \times 9\frac{7}{10} =$     25.  $2 \times 48\frac{9}{10} = 4 \times 21\frac{9}{10} =$

26. Wie oft ist 1 Zehntel in 8 Zehnteln enthalten?  
 27. Wie oft ist  $\frac{1}{10}$  in 1, 2, 7,  $4\frac{3}{10}$ ,  $\frac{1}{2}$ ,  $3\frac{1}{2}$  enthalten?  
 28. Wieviel ist der 8. Theil von  $\frac{48}{10}$ ,  $\frac{72}{10}$ ,  $9\frac{6}{10}$ ?

29. Wieviel Heller	}		{	Kronen?
30. „ dm		find		m?
31. „ l		$\frac{1}{10}$ , $\frac{2}{10}$ , $\frac{3}{10}$ ,		hl?
32. „ dkg		$\frac{4}{10}$ , $\frac{5}{10}$ , $\frac{7}{10}$ ,		kg?
33. „ Minuten		$\frac{8}{10}$ , $\frac{9}{10}$		Stunden?

34. Eine Frau kauft Kaffee für  $1\frac{1}{10}$  K, Zucker für  $1\frac{4}{5}$  K und Reis für  $\frac{1}{2}$  K; wieviel hat sie im ganzen zu bezahlen?

35. Ein Stück Leinwand hat  $31\frac{3}{10}$  m; wieviel bleibt übrig, wenn  $18\frac{7}{10}$  m abgesehritten werden?

36. 1 m Tuch kostet  $8\frac{4}{5}$  K; wieviel kosten 9 m?

### 5. Hundertel.

Theilt man ein Ganzes in 100 gleiche Theile, so ist jeder Theil ein Hundertel ( $\frac{1}{100}$ ). Theilt man ein Ganzes zuerst in 10 Zehntel, und dann jedes Zehntel wieder in 10 gleiche Theile, so erhält man auch Hundertel.

(Versinnlichung an dem Meterstabe; die Decimeter sind Zehntel, die Centimeter sind Hundertel.)

1. Wieviel Hundertel hat 1 Ganzes?

2. „ Hundertel hat 1 Zehntel?

3. „ Hundertel sind 2, 3, 7, 9 Zehntel?

4. „ Zehntel sind 10, 20, 50, 80 Hundertel?

$$5. \quad 7 + 3\frac{5}{100} =$$

$$33\frac{3}{100} + 9\frac{9}{100} =$$

$$6. \quad \frac{7}{100} + \frac{7}{10} =$$

$$15\frac{23}{100} + 1\frac{3}{10} =$$

$$7. \quad 37\frac{41}{100} - 9 =$$

$$50\frac{73}{100} - 28\frac{21}{100} =$$

$$8. \quad 15 - \frac{23}{100} =$$

$$52\frac{3}{10} - 27\frac{9}{100} =$$

$$9. \quad 2 \times \frac{37}{100} =$$

$$9 \times \frac{11}{100} =$$

$$10. \quad 4 \times 9\frac{23}{100} =$$

$$5 \times 7\frac{19}{100} =$$

$$11. \quad 6 \times 15\frac{13}{100} =$$

$$3 \times 32\frac{11}{100} =$$

12. Wieviel Heller

13. „ cm

14. „ l

15. „ dkg

find

$\frac{1}{100}, \frac{19}{100}, \frac{47}{100},$

$\frac{50}{100}, \frac{77}{100}, \frac{93}{100}$

Kronen?

m?

hl?

kg?

16. Jemand gibt aus:  $25\frac{13}{100}$  K,  $37\frac{7}{10}$  K und  $19\frac{57}{100}$  K; wieviel zusammen?

17. Von 50 kg einer Ware werden  $18\frac{37}{100}$  kg verkauft; wieviel bleibt übrig?

18. Wieviel kosten 5 kg gebrannter Kaffee à  $4\frac{18}{100}$  K?

### III. Preisberechnungen.

a.

1. 1 *m* Seidenstoff kostet 6 K; wieviel kosten 9 *m*?  
9 *m* sind 9mal 1 *m*, 9 *m* kosten also 9mal 6 K, d. i. 54 K.
2. Ein Paar Stiefel kostet 15 K; wieviel kosten 6 Paar?
3. 1 *hl* Wein kostet 48 K; wieviel kosten 2 *hl*?
4. Wieviel kosten 2, 3, 4, 5 *hl* Hirse à 16 K?
5. Wieviel kosten 2, 5, 6, 9 Stück Pelzmützen à 6 K 8 h?
6. Wieviel kosten 3, 4, 7 Schultaschen à 3 K 12 h?
7. Wieviel kosten 6 Paar Handschuhe à 2 K 16 h?
8. 1 Lage Papier kostet 18 h; wieviel kosten 5 Lagen?
9. Wieviel kosten 7 Stühle à 9 K 14 h?

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10. 1 *dm* Wollschnur kostet 1 h; wieviel kostet 1 *m*?  
1 *m* ist  $10 \times 1 \text{ dm}$ , 1 *m* kostet also  $10 \times 1 \text{ h} = 10 \text{ h} = 1 \text{ Zehnhellerstück}$ .

11. Wieviel Zehnhellerstücke kostet 1 *m*, wenn 1 *dm* 2, 4, 7, 9, 12, 38, 65 h kostet?

12. 1 Lage Papier kostet 8 h; wieviel kostet 1 Buch?

13. Wieviel Zehnhellerstücke kostet 1 Buch, wenn 1 Lage 5, 9, 12 h kostet?

14. 1 *dkg* Feigenkaffee kostet 1 h; wieviel kostet 1 *kg*?

15. Wieviel Kronen kostet 1 *kg*, wenn 1 *dkg* 9, 20, 32, 50, 72 h kostet?

16. Ein *kg* altes Eisen kostet 8 h; wieviel kostet 1 *q*?

17. Wieviel Kronen kostet 1 *q*, wenn 1 *kg* 9, 12, 20, 28, 36, 48 h kostet?

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18. 1 *kg* gedörrte Pflaumen kostet 43 h; wieviel kosten 6 *kg*?

1 *kg* kostet 43 h = 4 Zehnhellerstücke + 3 h

6 *kg* kosten  $6 \times 4$  Zehnhellerstücke +  $6 \times 3$  h

$6 \times 4$  Zehnhellerstücke = 24 Zehnhellerstücke = 2 K 40 h

$6 \times 3$  h . . . . . = 18 h

2 K 40 h + 18 h . . . = 2 K 58 h.

19. 1 kg Reis kostet 52 h; wieviel kosten 7 kg?  
 20. 1 l Bier kostet 31 h; wieviel kosten 5 l?  
 21. Wieviel kosten 2, 5, 8, 9, 10 l Milch à 17 h?  
 22. " " 3, 4, 6, 7, 9 l Bier à 28 h?  
 23. " " 8, 2, 5, 4, 6 kg Mehl à 36 h?  
 24. " " 6, 9, 3, 7, 10 kg Rimmel à 64 h?  
 25. " " 3, 10, 4, 5, 7 m Seidenstoff à 4 K 60 h?  
 26. " " 6, 8, 7, 9, 4 m Tuch à 8 K 10 h?  
 27. " " 2, 5, 7, 9 hl Korn à 10 K 5 h?

28. 1 m Band kostet 26 h;  
 wieviel kosten 16 m?

$$1 \text{ m kostet } 26 \text{ h} = \frac{1}{4} \text{ K} + 1 \text{ h}$$

$$16 \text{ „ kosten } \frac{16}{4} \text{ K} + 16 \times 1 \text{ h}$$

$$\frac{16}{4} \text{ K} \dots = 4 \text{ K}$$

$$16 \times 1 \text{ h} = 16 \text{ h}$$

$$4 \text{ K} + 16 \text{ h} = 4 \text{ K } 16 \text{ h.}$$

29. 1 l Linsen kostet 48 h;  
 wieviel kosten 7 l?

$$1 \text{ l kostet } 48 \text{ h} = \frac{1}{2} \text{ K} - 2 \text{ h}$$

$$7 \text{ „ kosten } \frac{7}{2} \text{ K} - 7 \times 2 \text{ h}$$

$$\frac{7}{2} \text{ K} \dots = 3 \text{ K } 50 \text{ h}$$

$$7 \times 2 \text{ h} = 14 \text{ h}$$

$$3 \text{ K } 50 \text{ h} - 14 \text{ h} = 3 \text{ K } 36 \text{ h.}$$

30. 1 m kostet 20, 25, 50 h; wieviel kosten 18 m?

31. 1 l Essig kostet 21 h; wieviel kosten 9 l?

$$21 \text{ h} = \frac{1}{5} \text{ K} + 1 \text{ h.}$$

32. 1 kg Graupen kostet 49 h; wie hoch kommen 6 kg?

33. 1 Stück Federmesser kostet 97 h; wieviel kosten 7 Stück?

$$97 \text{ h} = 1 \text{ K} - 3 \text{ h.}$$

34. Wieviel kosten 8 m à 25, 27, 53, 98 h?

### b.

35. 5 Duzend Krügen kosten 20 K; wieviel kostet 1 Duzend?

1 Duzend ist der 5. Theil von 5 Duzend, 1 Duzend kostet daher nur den 5. Theil von 20 K, d. i. 4 K.

36. 7 m Tuch kosten 56 K; wieviel kostet 1 m?

37. 8 l Milch kosten 96 h; wieviel kostet 1 l?

38. 8 Duzend Taschentücher kosten 56 K; wieviel kostet 1 Duzend?

39. 6 Stück Siegellackstangen kosten 84 h; wieviel kostet 1 Stück?



40. Für 8 K kauft man 32 l Obstwein; wieviel für 1 K?  
 41. Für 5 K kauft man 40 kg Gips; wieviel für 1 K?  
 42. 3 Paar Kinderschuhe kosten 9 K 72 h; wieviel kostet 1 Paar?  
 43. 8 m Tuch kosten 40 K 48 h; wieviel kostet 1 m?  
 44. 9 hl Hafer kosten 81 K 36 h; wieviel kostet 1 hl?

---

45. 1 m Band kostet 1 Zehnhellerstück; wieviel kostet 1 dm?  
 $\frac{1}{10}$  von 1 Zehnhellerstück = 1 h.

46. Wieviel Heller kostet 1 dm, wenn 1 m 2, 8, 18, 26,  
 40 Zehnhellerstücke kostet?

47. 1 kg Feigen kostet 1 K; wieviel kostet 1 dkg?

48. Wieviel Heller kostet 1 dkg Wachs, wenn 1 kg 4 K kostet?

49. Wieviel Heller kostet 1 kg, wenn 1 q 7, 9, 28, 40 K kostet?

50. Wieviel Heller kostet 1 l, wenn 1 hl 18, 24, 68, 32 K kostet?

### c.

51. 4 kg Rosinen kosten 5 K; wieviel kosten 12 kg?

12 kg sind 3mal 4 kg, 12 kg kosten daher 3mal 5 K, d. i. 15 K.

52. Für 2 Schulkinder zahlt man 9 K Schulgeld; wieviel  
 für 14 Kinder?

53. 6 l Wein kosten 4 K; wieviel kosten 24 l?

54. 8 Stück Badeschwämme „ 6 K; „ „ 40 Stück?

55. 7 kg Reis „ 4 K; „ „ 63 kg?

56. 2 hl Gerste „ 21 K; „ „ 8 hl?

57. 25 dkg Thee „ 4 K; wieviel kostet 1 kg?

58. 20 l Wein „ 12 K; „ „ 1 hl?

59. 2 Lagen Papier „ 18 h; „ „ 1 Buch?

60. 8 m Seidenband kosten 12 K 16 h; wie hoch kommen 16,  
 24, 40 m?

## d.

61. 15 l Wein kosten 9 K; wieviel kosten 5 l?  
5 l sind der 3. Theil von 15 l, 5 l kosten also auch nur den 3. Theil von 9 K, d. i. 3 K.
62. 16 kg Stärke kosten 12 K; wieviel kosten 4 kg?
63. 20 m Seidenstoff " 85 K; " " 4 m?
64. 32 dkg Safran " 28 K; " " 8 dkg?
65. 48 l Bier " 18 K; " " 8 l?
66. 100 kg Gries kosten 34 K 60 h; wieviel kosten 50 kg?
67. 1 hl Essig kostet 20 K 75 h; wieviel kosten 20 l?
68. 1 hl Linsen kostet 48 K 80 h; wieviel kosten 50, 25 l?
69. 1 kg Vanille kostet 70 K 65 h; wieviel kosten 20 dkg?
70. 40 kg Rüböl kosten 50 K; wieviel kosten 20, 10, 5 kg?

## e.

71. 4 hl Hafer kosten 36 K; wieviel kosten 7 hl?  
4 hl kosten 36 K  
1 " kostet  $\frac{1}{4}$  von 36 K = 9 K  
7 " kosten  $7 \times 9$  K = 63 K.
72. 5 l Milch kosten 90 h; wieviel kostet 1 l? wieviel kosten 3 l?
73. 7 m Sammt kosten 91 K; wieviel kosten 5 m?
74. 8 m Drahtseil " 24 K; " " 3 m?
75. 4 hl Mais " 44 K; " " 9 hl?
76. 5 Duzend Federmesser " 30 K; " " 8 Duzend?
77. 3 kg Honig kosten 3 K 75 h; wie hoch kommen 2, 4 kg?
78. 3 Knabenanzüge kosten 48 K 24 h; wieviel kosten 2, 5, 4, 6 Anzüge?
79. 4 kg Gips kosten 60 h; wie hoch kommt 1 q?
80. 1 q Unschlitt kostet 95 K; wieviel kosten 3 kg?
81. 3 l Essig kosten 72 h; wie hoch kommen 4 hl?

## Maße, Gewichte und Münzen.

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### Längenmaße.

- 1 Meter (*m*) = 10 Decimeter (*dm*) = 100 Centimeter (*cm*).  
 1 Decimeter = 10 Centimeter.

### Sohlmaße.

- 1 Hektoliter (*hl*) = 100 Liter (*l*).  
 1 Liter = 10 Deciliter (*dl*).

### Zeitmaße.

- 1 Jahr = 12 Monate; 1 Woche = 7 Tage;  
 1 Tag = 24 Stunden; 1 Stunde = 60 Minuten.

### Zählmaße.

- 1 Schock = 60 Stück; 1 Duzend = 12 Stück;  
 1 Rieß Papier = 10 Buch; 1 Buch = 10 Lagen; 1 Lage =  
 10 Bogen.

### Gewichte.

- 1 metrischer Centner (*q*) = 100 Kilogramm (*kg*).  
 1 Kilogramm = 100 Decagramm (*dkg*).  
 1 Decagramm = 10 Gramm (*g*).

### Münzen.

An die Stelle der bisherigen österreichischen Währung tritt die Goldwährung (Kronenwährung), deren Rechnungseinheit die Krone ist.

Die Krone (K) wird in hundert Heller (h) eingetheilt.

Als Landes-Goldmünzen werden ausgeprägt:

- a) Zwanzigkronenstücke;
- b) Zehnkronenstücke.

Als Silbermünzen werden ausgeprägt:  
Einkronenstücke.

Als Nickelmünzen werden ausgeprägt:

- a) Zwanzighellerstücke;
- b) Zehnhellerstücke.

Als Bronzemünzen werden ausgeprägt:

- a) Zweihellerstücke;
- b) Einhellerstücke.

Außer den Landes-Goldmünzen der Kronenwährung werden auch jetzt noch als Handelsmünze die österreichischen Ducaten (in Gold), ebenso die sogenannten Levantiner oder Maria-Theresia=Thaler (in Silber) ausgeprägt.

Die Einheit der österreichischen Währung war 1 Gulden (fl.) = 100 Kreuzer (kr.).

Die Krone (Einkronenstück)	hat den Wert von	50	kr.	öst.	W.
Das Zwanzighellerstück	" " " "	10	"	"	"
" Zehnhellerstück	" " " "	5	"	"	"
" Zweihellerstück	" " " "	1	"	"	"
" Einhellerstück	" " " "	1/2	"	"	"





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