

Erstes Rechenbuch —

für

R. D. 2

österreichische allgemeine Volksschulen.

Von

Dr. Franz Ritter v. Močnik.



Preis 18 h. —

Wien. ▽

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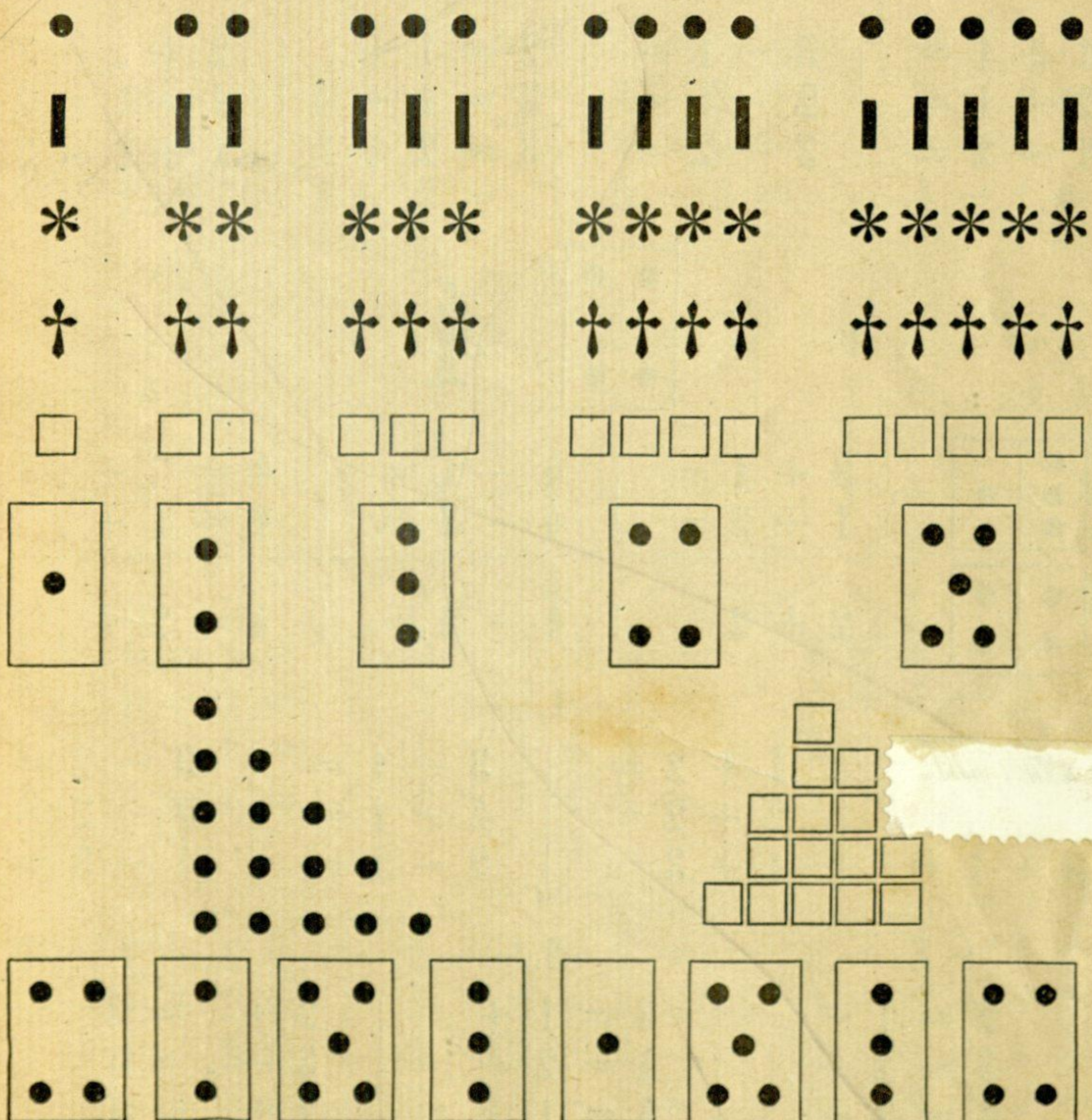
2016 01032

Erster Abschnitt.

Zahlenraum von eins bis zehn.

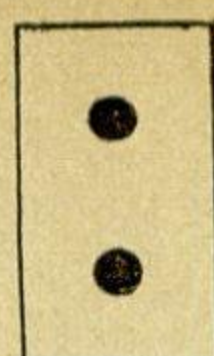
Zahlen von eins bis fünf.

(Anschauung, Zuzählen und Wegzählen.)

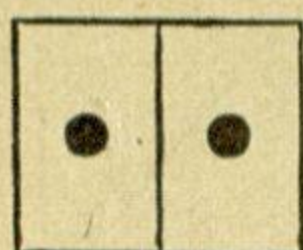




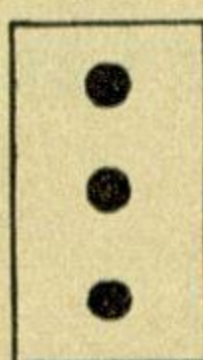
1



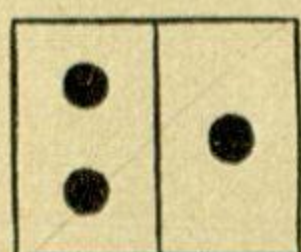
2



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

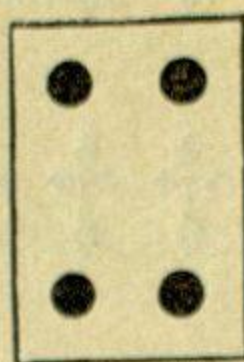


3

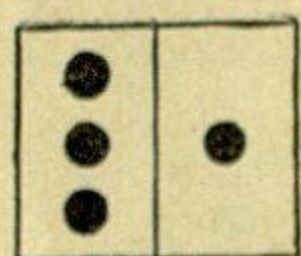


$$\begin{array}{l} 2 + 1 = \\ 1 + 2 = \end{array} \quad | \quad \begin{array}{l} 3 - 1 = \\ 3 - 2 = \end{array} \quad | \quad \begin{array}{l} 3 = 2 + . \\ 3 = 1 + . \end{array}$$

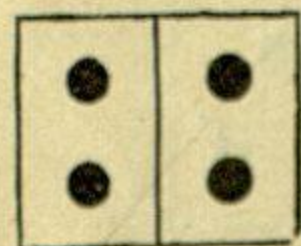
$$\begin{array}{l} 1 + 1 = \\ 2 + 1 = \\ 1 + 2 = \end{array} \quad | \quad \begin{array}{l} 3 - 1 = \\ 2 - 1 = \\ 3 - 2 = \end{array} \quad | \quad \begin{array}{l} 2 = 1 + . \\ 3 = 1 + . \\ 3 = 2 + . \end{array} \quad | \quad \begin{array}{l} 2 + . = 3 \\ 1 + . = 2 \\ 1 + . = 3 \end{array}$$



4



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



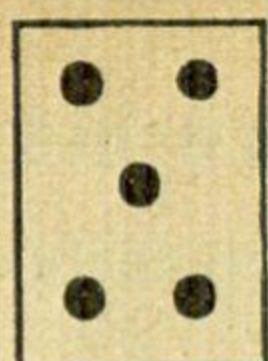
$$2 + 2 = \quad | \quad 4 - 2 = \quad | \quad 4 = 2 + .$$

- 1. -

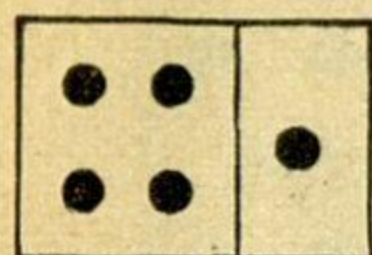
$$\begin{array}{l} 1 + 1 = \\ 2 + 1 = \\ 3 + 1 = \end{array} \quad | \quad \begin{array}{l} 1 + 2 = \\ 2 + 2 = \\ 1 + 3 = \end{array} \quad | \quad \begin{array}{l} 3 - 1 = \\ 4 - 1 = \\ 2 - 1 = \end{array} \quad | \quad \begin{array}{l} 3 - 2 = \\ 4 - 2 = \\ 4 - 3 = \end{array}$$

- 2. -

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



5



$4 + 1 =$

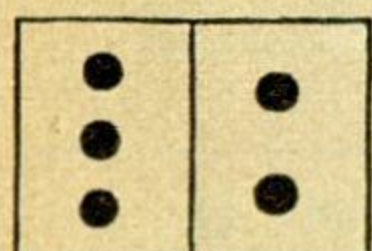
$1 + 4 =$

$5 - 1 =$

$5 - 4 =$

$5 = 4 + .$

$5 = 1 + .$



$3 + 2 =$

$2 + 3 =$

$5 - 2 =$

$5 - 3 =$

$5 = 3 + .$

$5 = 2 + .$

- 1. -

$1 + 1 =$

$4 + 1 =$

$3 + 1 =$

$2 + 1 =$

$3 + 2 =$

$2 + 2 =$

$1 + 2 =$

$1 + 3 =$

$2 + 3 =$

$1 + 4 =$

$3 + 1 =$

$3 + 2 =$

- 2. -

$2 - 1 =$

$3 - 1 =$

$4 - 1 =$

$5 - 1 =$

$3 - 2 =$

$5 - 2 =$

$4 - 2 =$

$4 - 3 =$

$5 - 3 =$

$5 - 4 =$

$3 - 2 =$

$4 - 1 =$

- 3. -

$2 = 1 + .$

$5 = 4 + .$

$4 = 2 + .$

$5 = 1 + .$

$3 + . = 4$

$2 + . = 3$

$1 + . = 3$

$3 + . = 5$

$2 + . = 4$

$1 + . = 4$

$2 + . = 5$

$1 + . = 5$

- 4. -

$1 + 1 + 1 =$

$2 + 1 + 1 =$

$1 + 2 + 1 =$

$1 + 3 + 1 =$

$2 + 1 + 2 =$

$2 + 2 + 1 =$

$1 + 1 + 2 =$

$1 + 1 + 3 =$

$2 + 2 - 1 =$

$4 + 1 - 3 =$

$2 + 3 - 4 =$

$1 + 4 - 2 =$

- 5. -

$3 - 1 - 1 =$

$5 - 1 - 1 =$

$4 - 1 - 2 =$

$4 - 2 - 1 =$

$5 - 1 - 2 =$

$5 - 1 - 3 =$

$5 - 2 - 2 =$

$5 - 3 - 1 =$

$5 - 3 + 1 =$

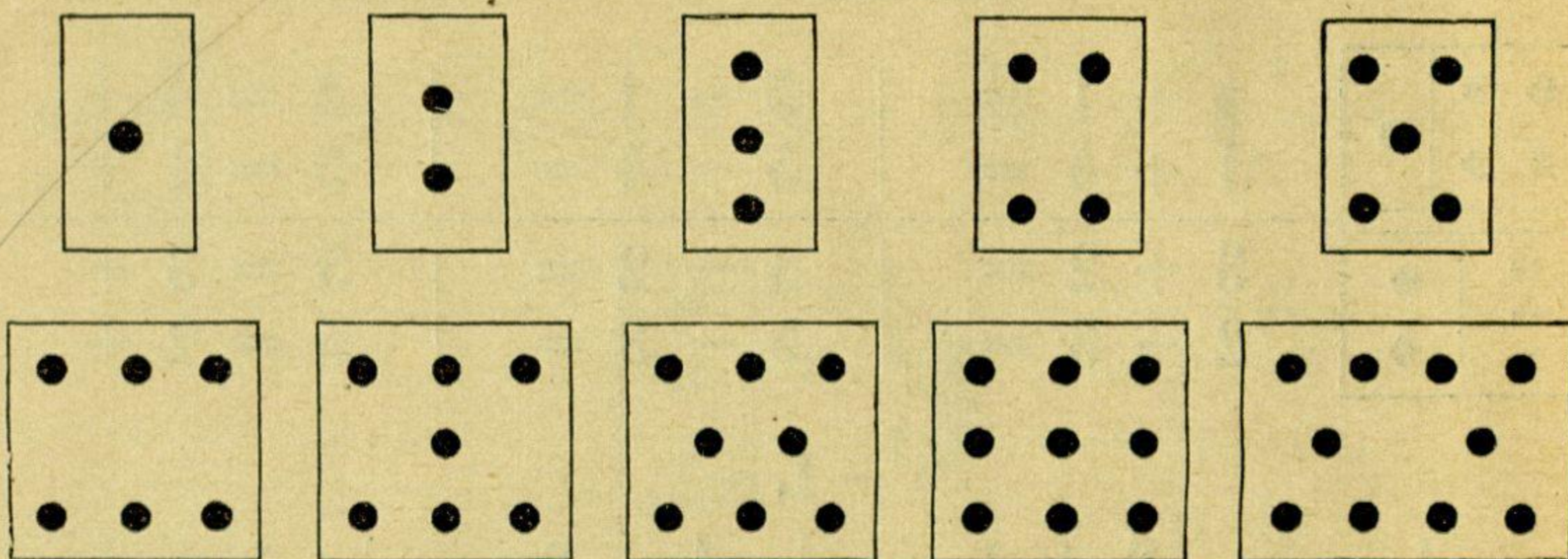
$4 - 2 + 3 =$

$2 - 1 + 4 =$

$5 - 4 + 2 =$

Zahlen von eins bis zehn.

(Allseitige Behandlung.)



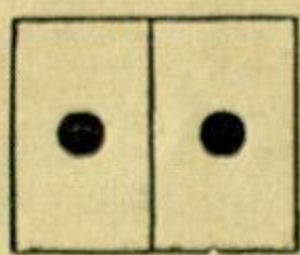
i

1



✦✦

2

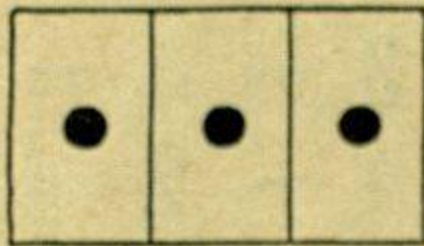


$$\begin{aligned} 1 + 1 &= \\ 2 - 1 &= \\ 2 &= 1 + . \end{aligned}$$

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

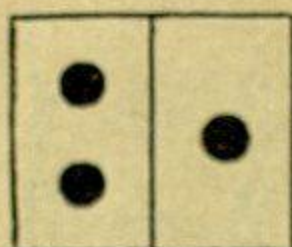
✦✦✦

3



$$1 + 1 + 1 =$$

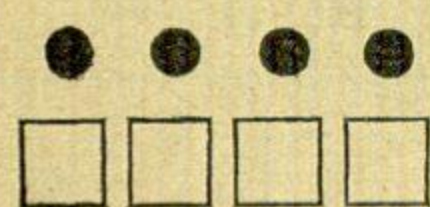
$$\begin{aligned} 3 \times 1 &= \\ 1 \text{ in } 3 &= \\ \frac{1}{3} \text{ v. } 3 &= \end{aligned}$$



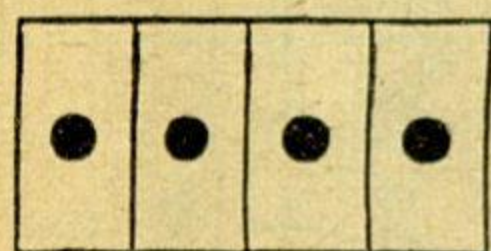
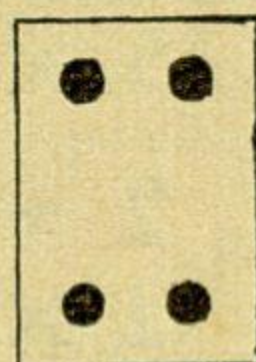
$$\begin{aligned} 2 + 1 &= \\ 1 + 2 &= \\ 3 - 1 &= \\ 3 - 2 &= \end{aligned}$$

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

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

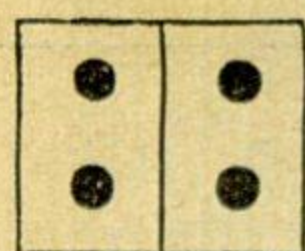


4



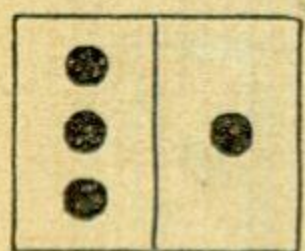
$1 + 1 + 1 + 1 =$

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



$2 + 2 =$
 $4 - 2 =$
 $4 = 2 + .$

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



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

$4 = 3 + .$
 $4 = 1 + .$
 $1 \times 3 + 1 =$
 $3 \text{ in } 4 =$

- 1. -

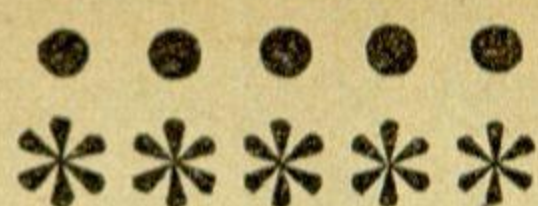
$2 + 1 =$	$1 + 2 =$	$4 - 1 =$	$3 - 2 =$
$3 + 1 =$	$2 + 2 =$	$4 - 2 =$	$3 - 3 =$
$1 + 1 =$	$2 - 1 =$	$4 - 3 =$	$1 - 1 =$
$1 + 3 =$	$3 - 1 =$	$4 - 4 = 0$	$2 - 2 =$

- 2. -

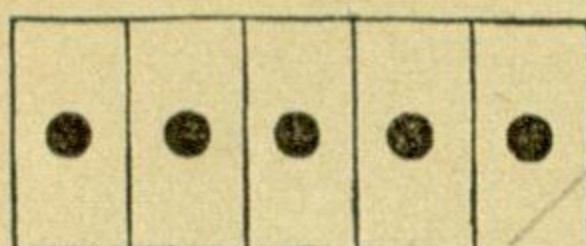
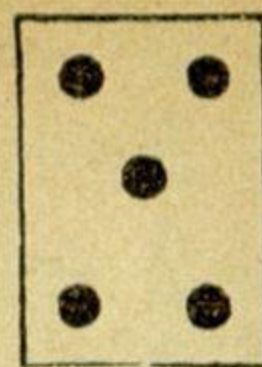
$4 = 2 + .$	$1 + . = 3$	$2 + 1 + 1 =$
$4 = 1 + .$	$2 + . = 4$	$3 + 1 - 2 =$
$3 = 2 + .$	$3 + . = 4$	$4 - 2 - 1 =$

- 3. -

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

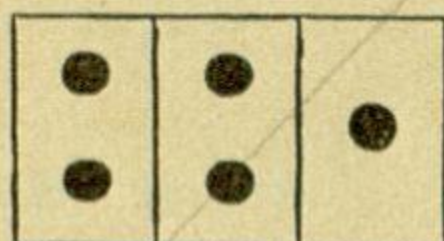


5



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

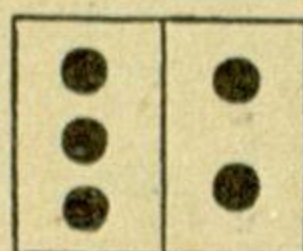
$$5 \times 1 = \quad | \quad 1 \text{ in } 5 = \quad | \quad \frac{1}{5} \text{ v. } 5 =$$



$$2 + 2 + 1 =$$

$$2 \times 2 + 1 =$$

$$2 \text{ in } 5 =$$



$$3 + 2 =$$

$$2 + 3 =$$

$$5 - 2 =$$

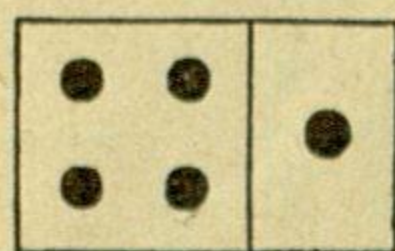
$$5 - 3 =$$

$$5 = 3 + .$$

$$5 = 2 + .$$

$$1 \times 3 + 2 =$$

$$3 \text{ in } 5 =$$



$$4 + 1 =$$

$$1 + 4 =$$

$$5 - 1 =$$

$$5 - 4 =$$

$$5 = 4 + .$$

$$5 = 1 + .$$

$$1 \times 4 + 1 =$$

$$4 \text{ in } 5 =$$

- 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. -

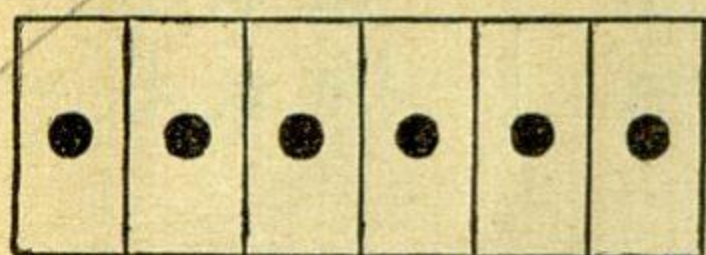
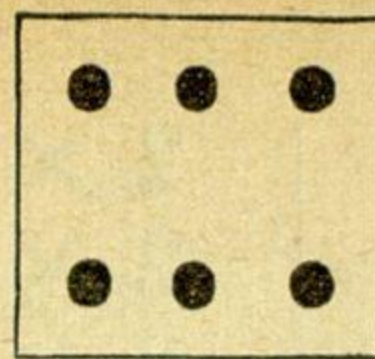
$3 = 2 + .$	$1 + . = 3$	$2 + 1 + 2 =$
$4 = 3 + .$	$4 + . = 5$	$5 - 1 - 2 =$
$5 = 2 + .$	$3 + . = 5$	$3 + 2 - 1 =$
$4 = 2 + .$	$2 + . = 5$	$5 - 4 + 3 =$

- 3. -

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

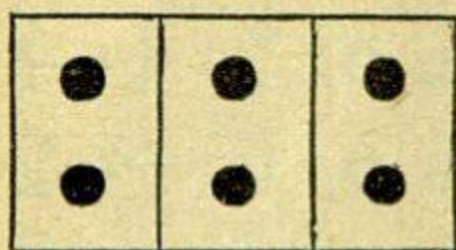


6



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

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

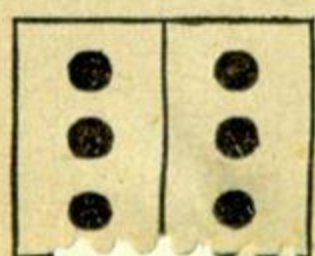


$$2 + 2 + 2 =$$

$$3 \times 2 =$$

$$2 \text{ in } 6 =$$

$$\frac{1}{3} \text{ v. } 6 =$$



$$3 + 3 =$$

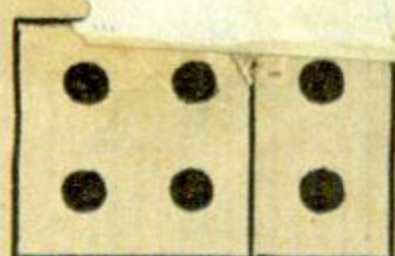
$$6 - 3 =$$

$$6 = 3 + .$$

$$2 \times 3 =$$

$$3 \text{ in } 6 =$$

$$\frac{1}{2} \text{ v. } 6 =$$



$$4 + 2 =$$

$$2 + 4 =$$

$$6 - 2 =$$

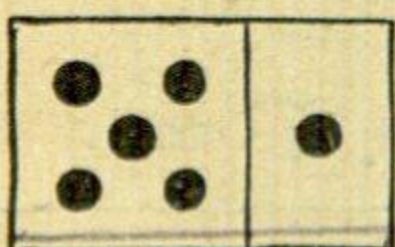
$$6 - 4 =$$

$$6 = 4 + .$$

$$6 = 2 + .$$

$$1 \times 4 + 2 =$$

$$4 \text{ in } 6 =$$



$$5 + 1 =$$

$$1 + 5 =$$

$$6 - 1 =$$

$$6 - 5 =$$

$$6 = 5 + .$$

$$6 = 1 + .$$

$$1 \times 5 + 1 =$$

$$5 \text{ in } 6 =$$

- 1. -

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

- 2. -

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

- 3. -

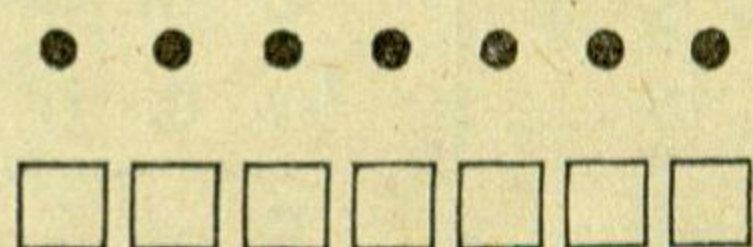
$2 + 1 + 3 =$	$3 + 2 + 1 =$	$1 + 2 + 2 =$
$2 + 3 - 4 =$	$1 + 5 - 3 =$	$4 + 2 - 5 =$
$5 - 1 + 2 =$	$6 - 5 + 4 =$	$4 - 3 + 5 =$
$6 - 3 - 1 =$	$6 - 4 - 2 =$	$5 - 1 - 4 =$

- 4. -

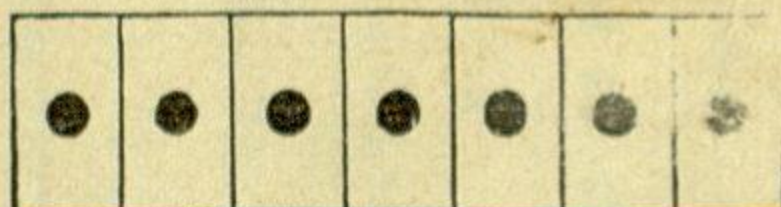
$3 \times 2 =$	$2 \times . = 4$	$1 \text{ in } 6 =$	$\frac{1}{2} \text{ v. } 6 =$
$2 \times 3 =$	$2 \times . = 6$	$2 \text{ in } 4 =$	$\frac{1}{2} \text{ v. } 4 =$
$2 \times 2 =$	$3 \times . = 3$	$2 \text{ in } 6 =$	$\frac{1}{3} \text{ v. } 6 =$
$6 \times 1 =$	$3 \times . = 6$	$3 \text{ in } 6 =$	$\frac{1}{6}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

- 5. -

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

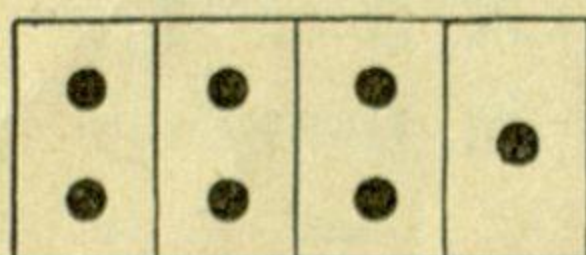


7



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

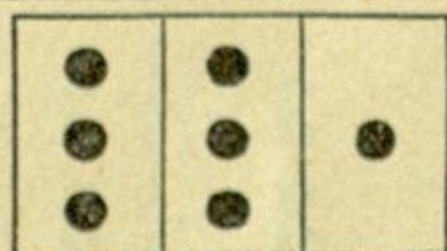
$$7 \times 1 = \quad | \quad 1 \text{ in } 7 = \quad | \quad \frac{1}{7} \text{ v. } 7 =$$



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

$$3 \times 2 + 1 =$$

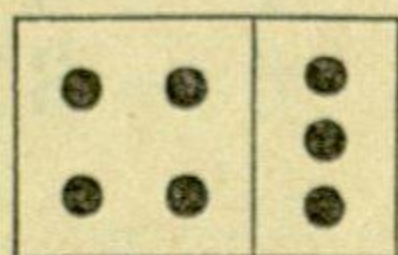
$$2 \text{ in } 7 =$$



$$3 + 3 + 1 =$$

$$2 \times 3 + 1 =$$

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



$$4 + 3 =$$

$$3 + 4 =$$

$$7 - 3 =$$

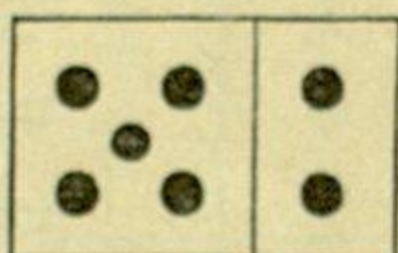
$$7 - 4 =$$

$$7 = 4 + .$$

$$7 = 3 + .$$

$$1 \times 4 + 3 =$$

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



$$5 + 2 =$$

$$2 + 5 =$$

$$7 - 2 =$$

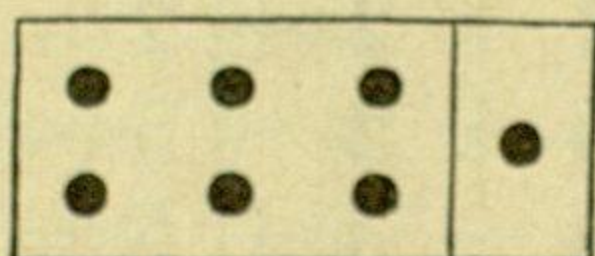
$$7 - 5 =$$

$$7 = 5 + .$$

$$7 = 2 + .$$

$$1 \times 5 + 2 =$$

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



$$6 + 1 =$$

$$1 + 6 =$$

$$7 - 1 =$$

$$7 - 6 =$$

$$7 = 6 + .$$

$$7 = 1 + .$$

$$1 \times 6 + 1 =$$

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

- 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. -

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

- 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. -

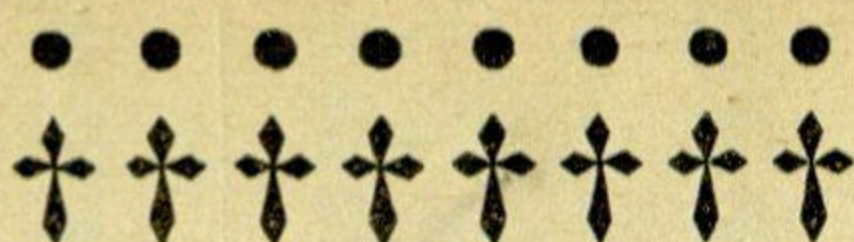
$2 + 2 + 2 =$	$3 - 2 + 1 =$	$5 - 2 - 1 =$
$1 + 3 + 2 =$	$5 - 2 + 4 =$	$6 - 3 - 2 =$
$2 + 3 + 1 =$	$7 - 5 + 3 =$	$4 - 1 - 2 =$
$5 + 2 - 4 =$	$7 - 3 + 1 =$	$6 - 2 - 3 =$
$5 + 1 - 2 =$	$4 - 3 + 6 =$	$7 - 5 - 1 =$
$2 + 4 - 2 =$	$7 - 4 + 2 =$	$7 - 3 - 4 =$

- 5. -

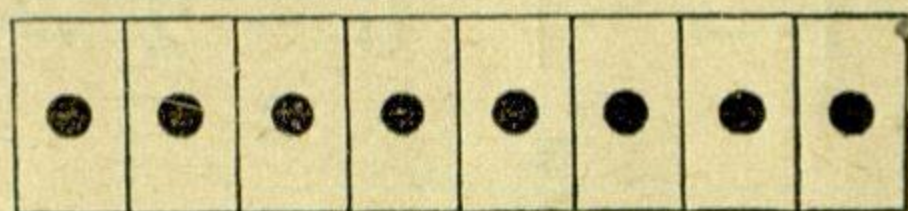
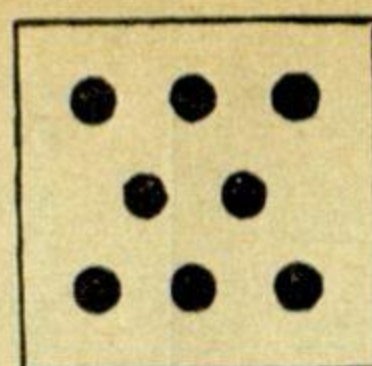
$1 \times 2 =$	$6 = 3 \times .$	$2 \text{ in } 4 =$	$1/2 \text{ v. } 4 =$
$2 \times 2 =$	$4 = 2 \times .$	$2 \text{ in } 6 =$	$1/2 \text{ v. } 6 =$
$3 \times 2 =$	$2 = 1 \times .$	$3 \text{ in } 6 =$	$1/3 \text{ v. } 3 =$
$2 \times 3 =$	$6 = 2 \times .$	$4 \text{ in } 7 =$	$1/3 \text{ v. } 6 =$
$7 \times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

- 6. -

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

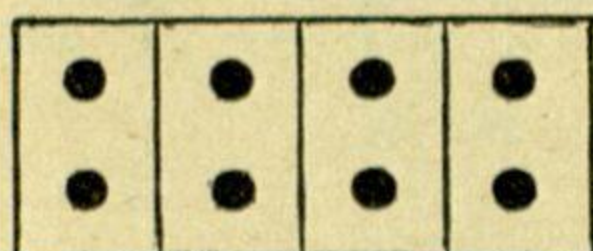


8



$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 8$$

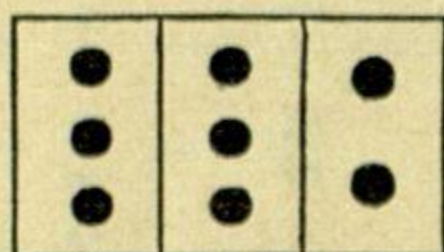
$$8 \times 1 = \quad | \quad 1 \text{ in } 8 = \quad | \quad \frac{1}{8} \text{ v. } 8 =$$



$$2 + 2 + 2 + 2 = 8$$

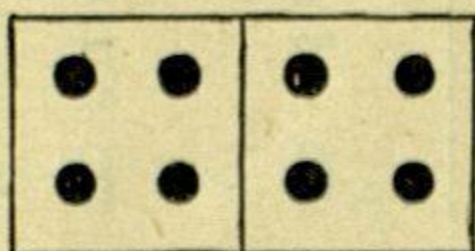
$$4 \times 2 = \quad | \quad 2 \text{ in } 8 =$$

$$\frac{1}{4} \text{ v. } 8 =$$



$$3 + 3 + 2 = 8$$

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



$$4 + 4 = 8$$

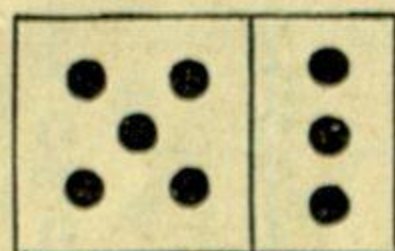
$$8 - 4 =$$

$$8 = 4 +$$

$$2 \times 4 =$$

$$4 \text{ in } 8 =$$

$$\frac{1}{2} \text{ v. } 8 =$$



$$5 + 3 = 8$$

$$3 + 5 = 8$$

$$8 - 3 =$$

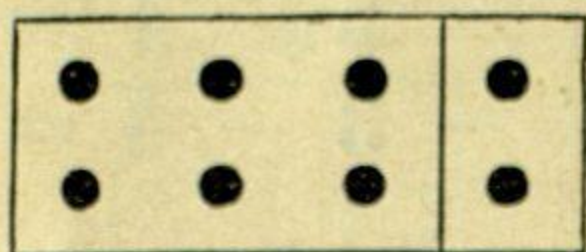
$$8 - 5 =$$

$$8 = 5 +$$

$$8 = 3 +$$

$$1 \times 5 + 3 =$$

$$5 \text{ in } 8 =$$



$$6 + 2 = 8$$

$$2 + 6 = 8$$

$$8 - 2 =$$

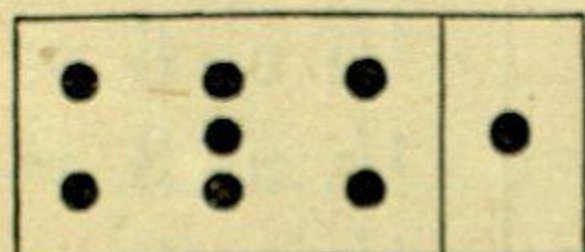
$$8 - 6 =$$

$$8 = 6 +$$

$$8 = 2 +$$

$$1 \times 6 + 2 =$$

$$6 \text{ in } 8 =$$



$$7 + 1 = 8$$

$$1 + 7 = 8$$

$$8 - 1 =$$

$$8 - 7 =$$

$$8 = 7 +$$

$$8 = 1 +$$

$$1 \times 7 + 1 =$$

$$7 \text{ in } 8 =$$

- 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. —

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

— 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. —

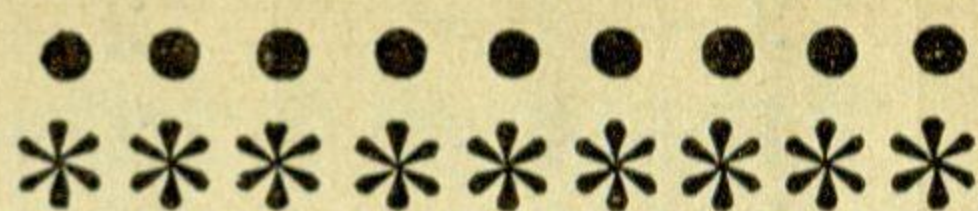
$3 \times 2 =$	$4 \times 2 =$	$2 \times . = 6$	$. \times 1 = 6$
$2 \times 4 =$	$1 \times 6 =$	$1 \times . = 7$	$. \times 2 = 4$
$7 \times 1 =$	$2 \times 3 =$	$4 \times . = 8$	$. \times 4 = 8$

— 7. —

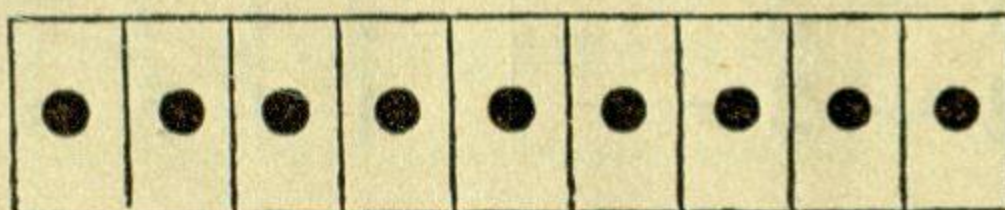
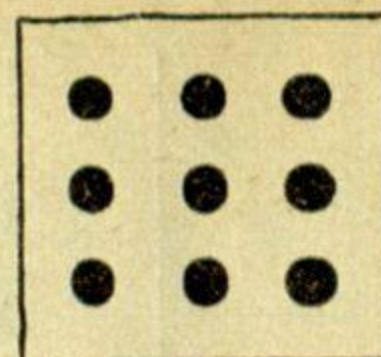
$2 \text{ in } 8 =$	$3 \text{ in } 6 =$	$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{3} \text{ v. } 6 =$
$2 \text{ in } 6 =$	$4 \text{ in } 8 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{4} \text{ v. } 8 =$
$2 \text{ in } 5 =$	$5 \text{ in } 7 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$

— 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

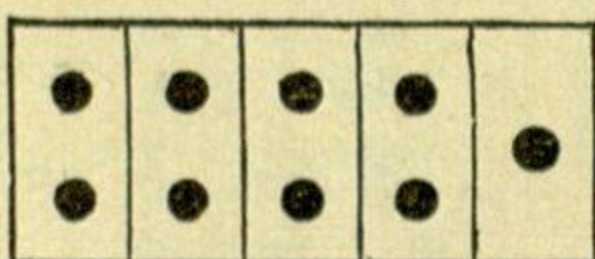


$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 =$$

$$9 \times 1 =$$

$$1 \text{ in } 9 =$$

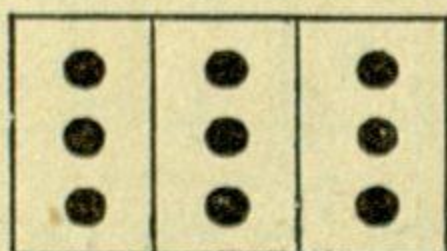
$$\frac{1}{9} \text{ v. } 9 =$$



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

$$4 \times 2 + 1 =$$

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

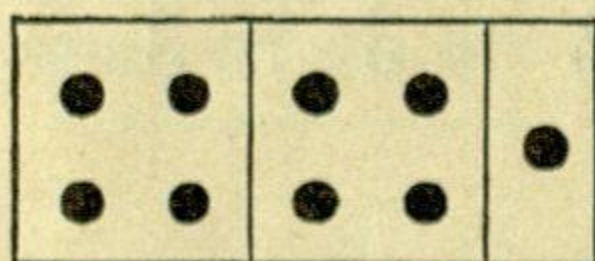


$$3 + 3 + 3 =$$

$$3 \times 3 =$$

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

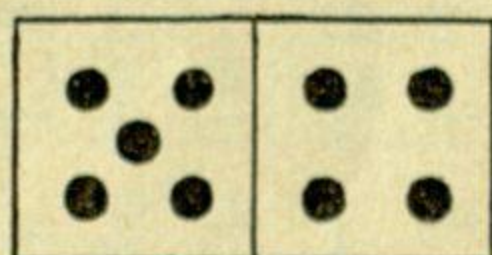
$$\frac{1}{3} \text{ v. } 9 =$$



$$4 + 4 + 1 =$$

$$2 \times 4 + 1 =$$

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



$$5 + 4 =$$

$$4 + 5 =$$

$$9 - 4 =$$

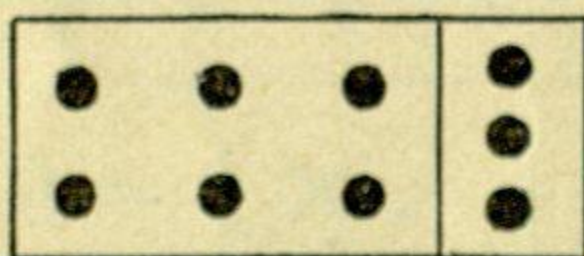
$$9 - 5 =$$

$$9 = 5 + .$$

$$9 = 4 + .$$

$$1 \times 5 + 4 =$$

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



$$6 + 3 =$$

$$3 + 6 =$$

$$9 - 3 =$$

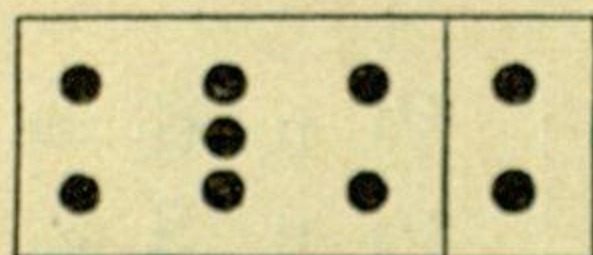
$$9 - 6 =$$

$$9 = 6 + .$$

$$9 = 3 + .$$

$$1 \times 6 + 3 =$$

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



$$7 + 2 =$$

$$2 + 7 =$$

$$9 - 2 =$$

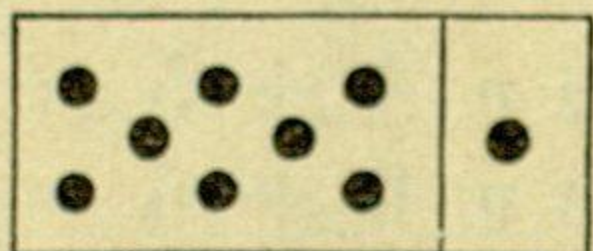
$$9 - 7 =$$

$$9 = 7 + .$$

$$9 = 2 + .$$

$$1 \times 7 + 2 =$$

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



$$8 + 1 =$$

$$1 + 8 =$$

$$9 - 1 =$$

$$9 - 8 =$$

$$9 = 8 + .$$

$$9 = 1 + .$$

$$1 \times 8 + 1 =$$

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

— 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. —

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

— 5. —

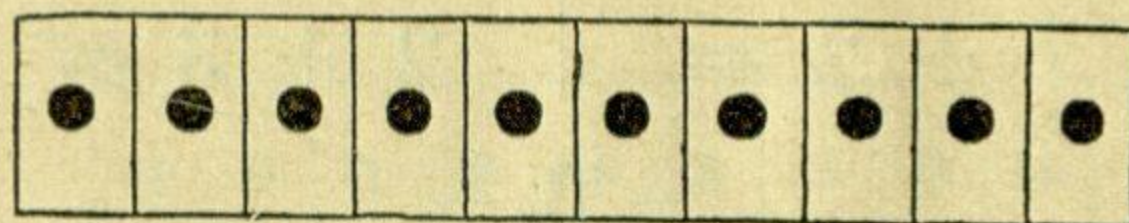
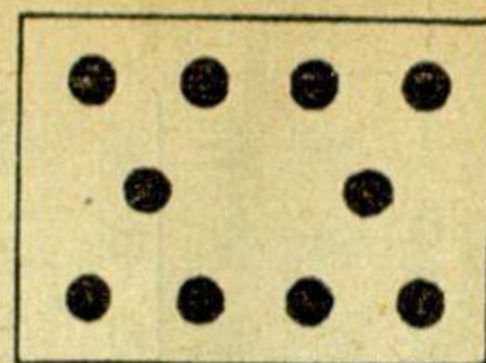
$2 \times 1 =$	$4 \times 2 =$	$1 \times 6 =$	$4 \times 1 =$
$1 \times 5 =$	$6 \times 1 =$	$2 \times 2 =$	$1 \times 9 =$
$2 \times 4 =$	$1 \times 8 =$	$1 \times 7 =$	$3 \times 2 =$
$3 \times 3 =$	$3 \times 1 =$	$2 \times 3 =$	$5 \times 1 =$

— 6. —

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

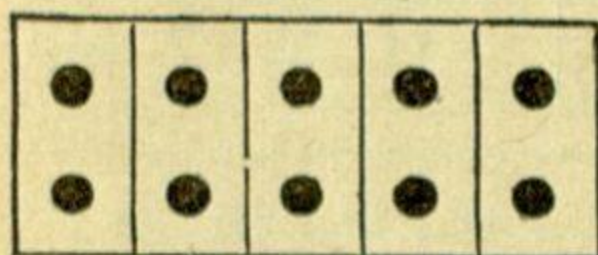
— 7. —

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


10


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

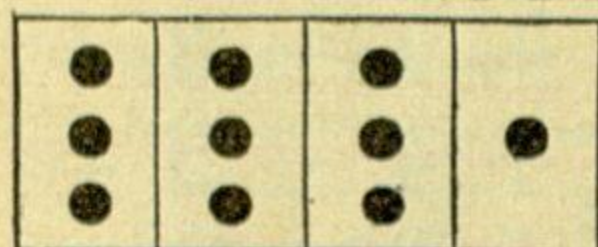
$$10 \times 1 = \quad | \quad 1 \text{ in } 10 = \quad | \quad \frac{1}{10} \text{ v. } 10 =$$



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

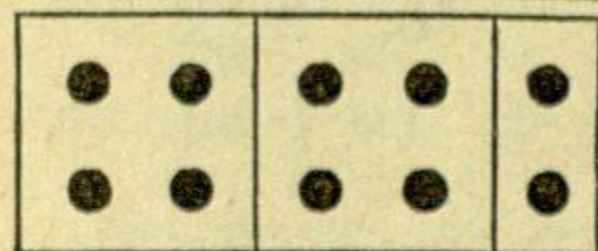
$$5 \times 2 = \quad | \quad 2 \text{ in } 10 =$$

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



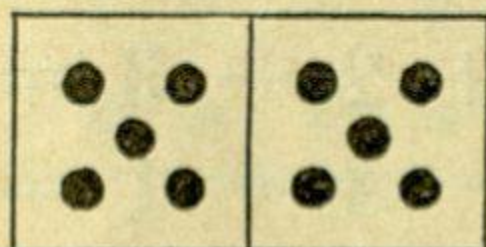
$$3 + 3 + 3 + 1 =$$

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



$$4 + 4 + 2 =$$

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



$$5 + 5 =$$

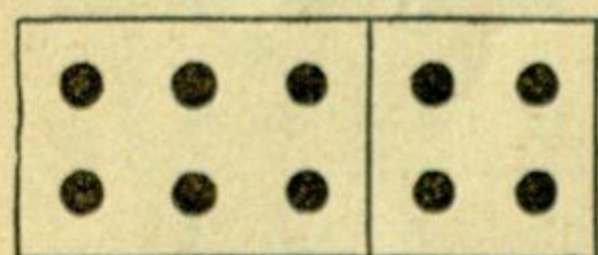
$$10 - 5 =$$

$$10 = 5 + .$$

$$2 \times 5 =$$

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

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



$$6 + 4 =$$

$$4 + 6 =$$

$$10 - 4 =$$

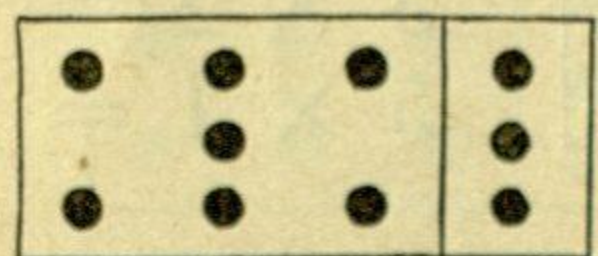
$$10 - 6 =$$

$$10 = 6 + .$$

$$10 = 4 + .$$

$$1 \times 6 + 4 =$$

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



$$7 + 3 =$$

$$3 + 7 =$$

$$10 - 3 =$$

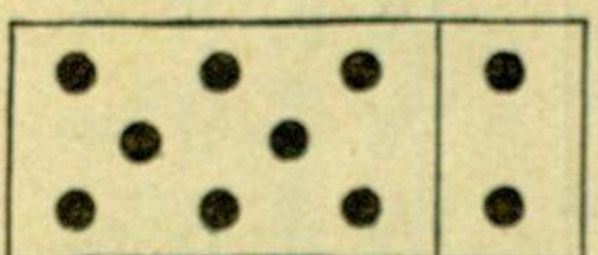
$$10 - 7 =$$

$$10 = 7 + .$$

$$10 = 3 + .$$

$$1 \times 7 + 3 =$$

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



$$8 + 2 =$$

$$2 + 8 =$$

$$10 - 2 =$$

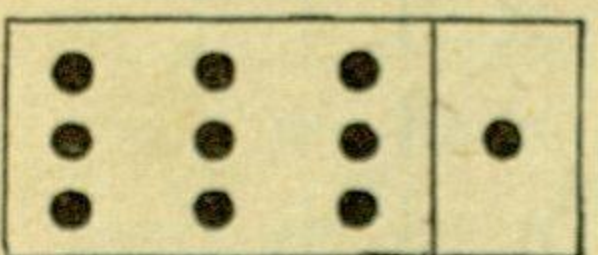
$$10 - 8 =$$

$$10 = 8 + .$$

$$10 = 2 + .$$

$$1 \times 8 + 2 =$$

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



$$9 + 1 =$$

$$1 + 9 =$$

$$10 - 1 =$$

$$10 - 9 =$$

$$10 = 9 + .$$

$$10 = 1 + .$$

$$1 \times 9 + 1 =$$

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

— 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. —

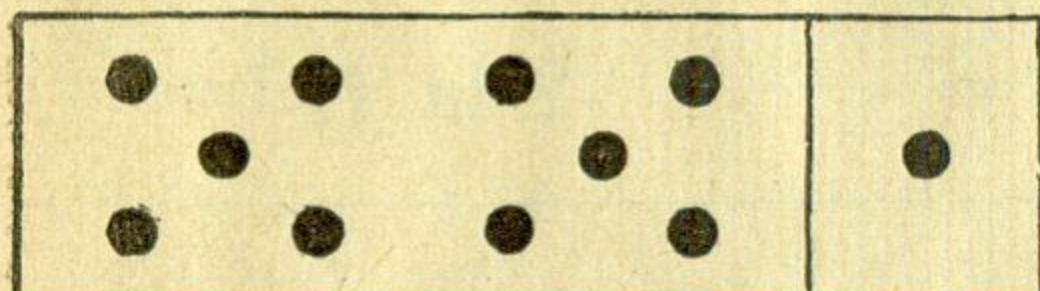
$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{6} \text{ v. } 6 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{4} \text{ v. } 4 =$	$\frac{1}{8} \text{ v. } 8 =$
$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{3} \text{ v. } 3 =$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

— 9. —

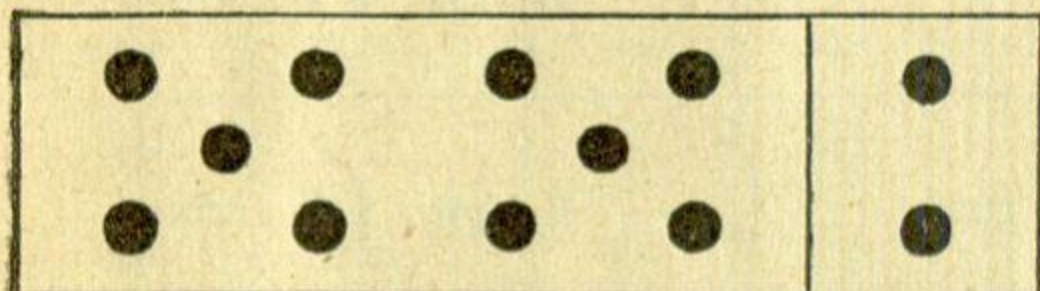
$2 \times 3 + 4 =$	$3 \times 2 + 4 =$	$\frac{1}{4} \text{ v. } 8 + 7 =$
$3 \times 1 + 5 =$	$3 \times 2 - 4 =$	$\frac{1}{5} \text{ v. } 10 + 6 =$
$2 \times 2 + 6 =$	$2 \times 2 + 2 =$	$\frac{1}{2} \text{ v. } 6 - 3 =$
$5 \times 2 - 7 =$	$2 \times 2 - 2 =$	$\frac{1}{2} \text{ v. } 10 - 4 =$
$2 \times 4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

Zweiter Abschnitt.

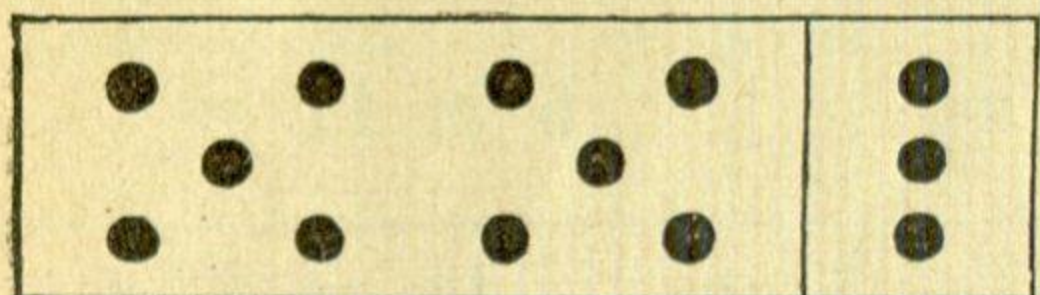
Erweiterung des Zahlenraumes bis
zwanzig.



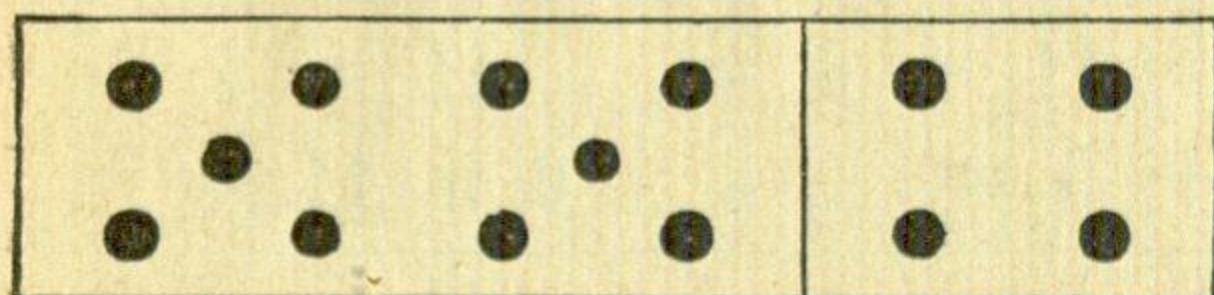
$$10 + 1 = 11$$



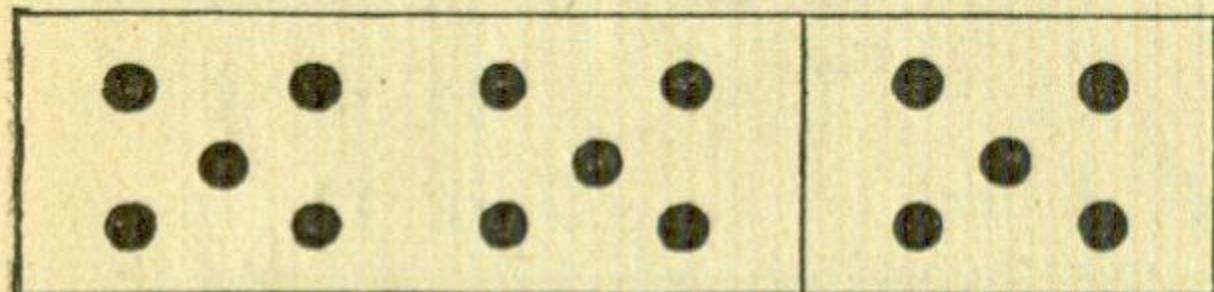
$$10 + 2 = 12$$



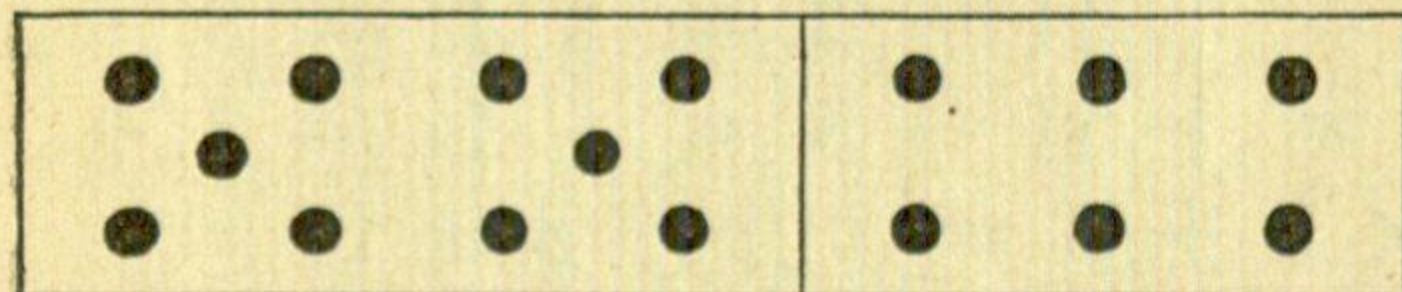
$$10 + 3 = 13$$



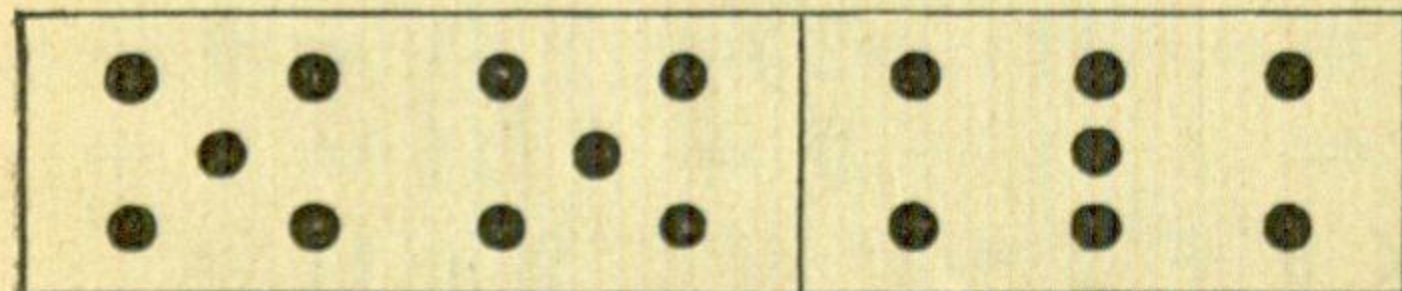
$$10 + 4 = 14$$



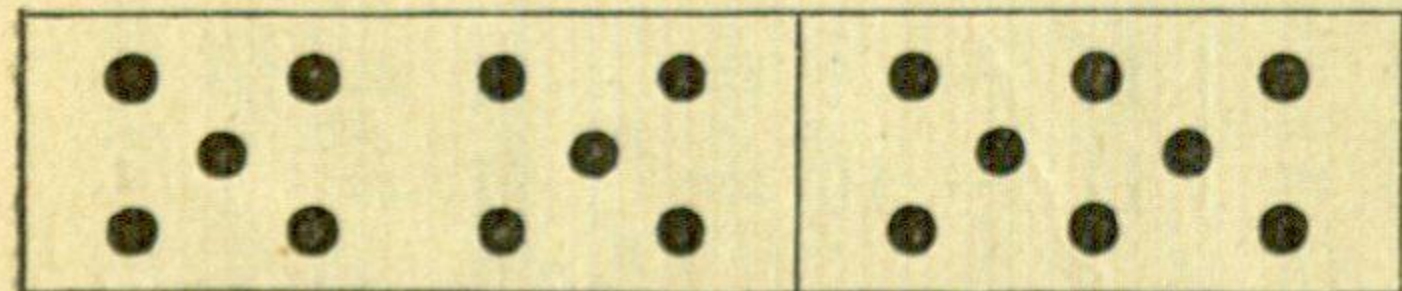
$$10 + 5 = 15$$



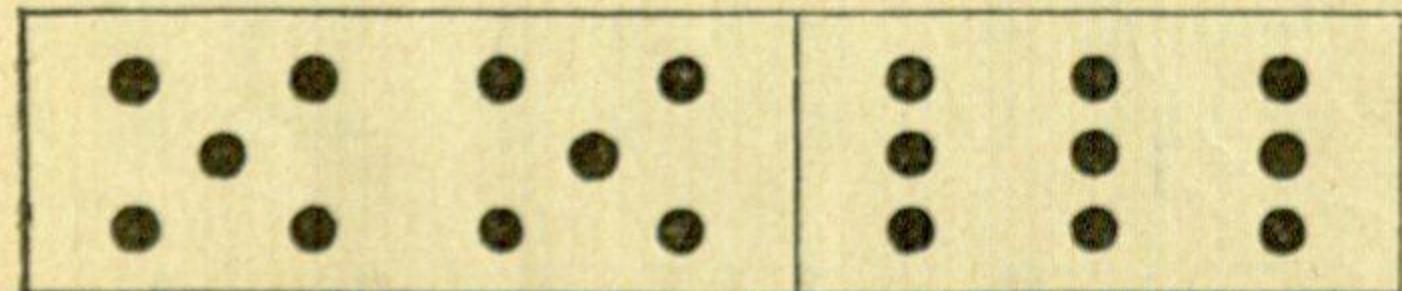
$$10 + 6 = 16$$



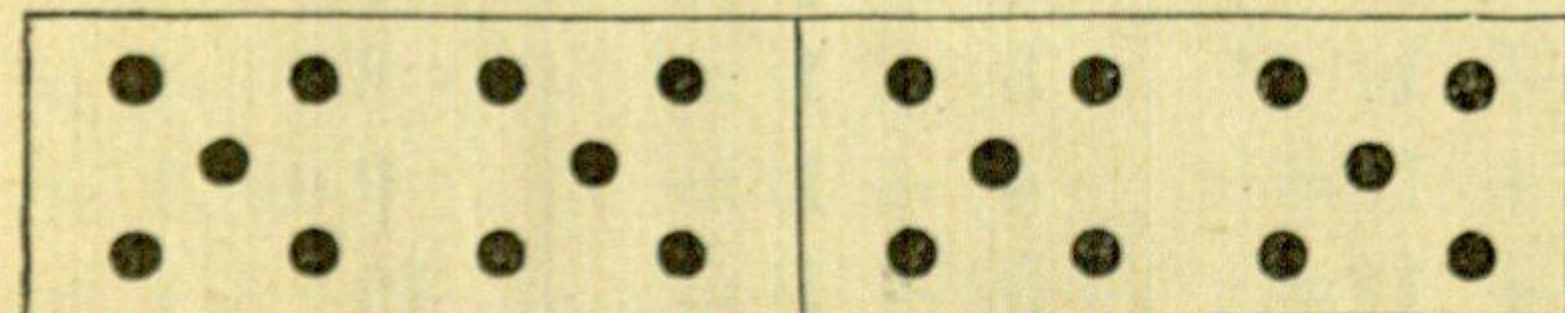
$$10 + 7 = 17$$



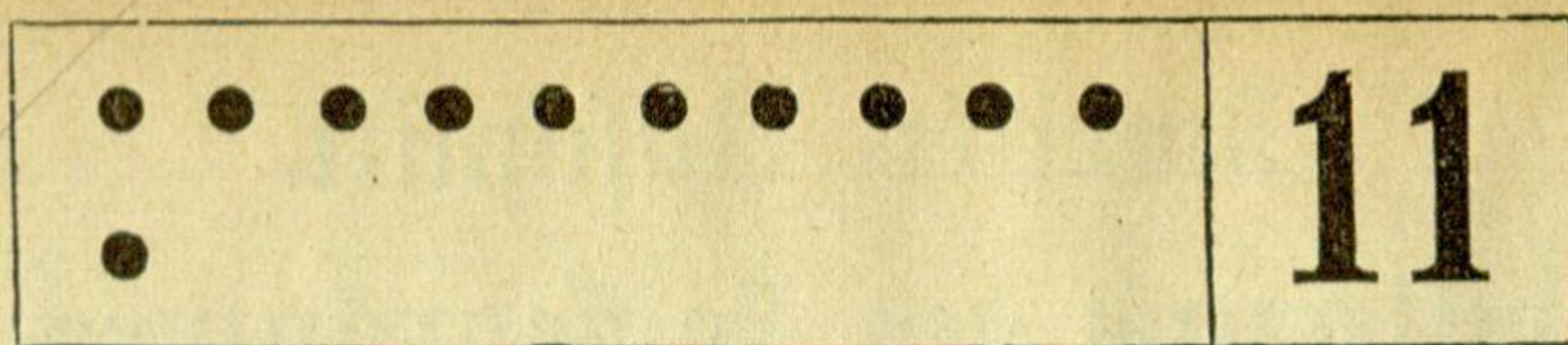
$$10 + 8 = 18$$

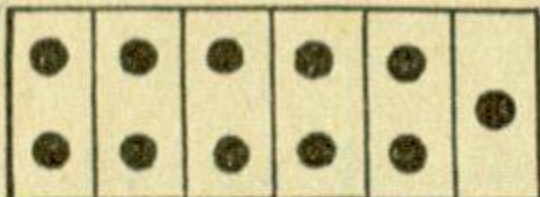
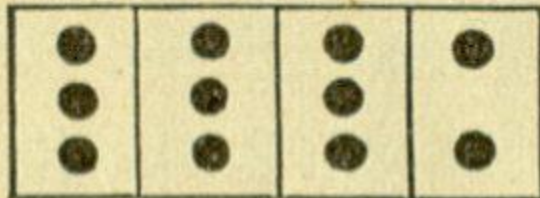
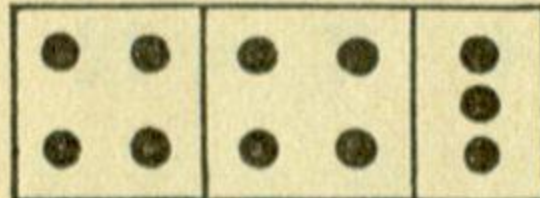
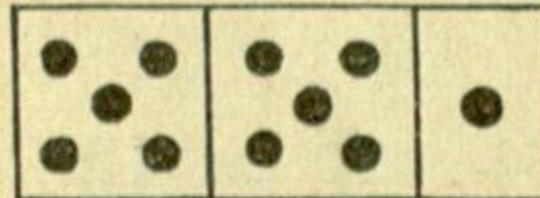
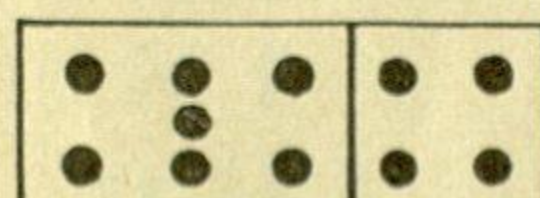
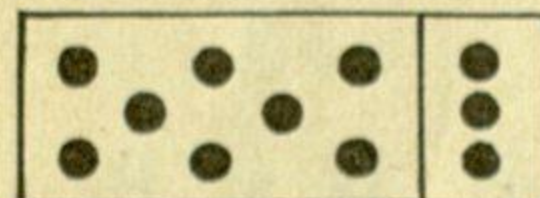
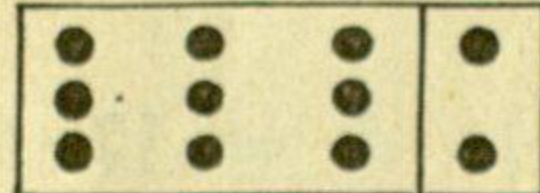
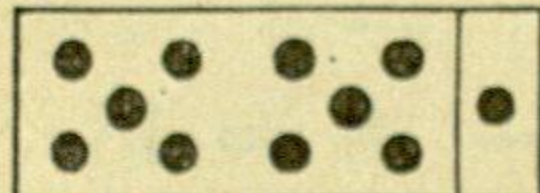


$$10 + 9 = 19$$



$$10 + 10 = 20$$



	$11 \times 1 =$	$1 \text{ in } 11 =$	
	$5 \times 2 + 1 =$	$2 \text{ in } 11 =$	
	$3 \times 3 + 2 =$	$3 \text{ in } 11 =$	
	$2 \times 4 + 3 =$	$4 \text{ in } 11 =$	
	$2 \times 5 + 1 =$	$5 \text{ in } 11 =$	
	$6 + 5 =$	$11 - 5 =$	$11 = 6 +$
	$5 + 6 =$	$11 - 6 =$	$11 = 5 +$
	$1 \times 6 + 5 =$	$6 \text{ in } 11 =$	
	$7 + 4 =$	$11 - 4 =$	$11 = 7 +$
	$4 + 7 =$	$11 - 7 =$	$11 = 4 +$
	$1 \times 7 + 4 =$	$7 \text{ in } 11 =$	
	$8 + 3 =$	$11 - 3 =$	$11 = 8 +$
	$3 + 8 =$	$11 - 8 =$	$11 = 3 +$
	$1 \times 8 + 3 =$	$8 \text{ in } 11 =$	
	$9 + 2 =$	$11 - 2 =$	$11 = 9 +$
	$2 + 9 =$	$11 - 9 =$	$11 = 2 +$
	$1 \times 9 + 2 =$	$9 \text{ in } 11 =$	
	$10 + 1 =$	$11 - 1 =$	$11 = 10 +$
	$1 + 10 =$	$11 - 10 =$	$11 = 1 +$
	$1 \times 10 + 1 =$	$10 \text{ in } 11 =$	

- 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. —

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

— 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. —

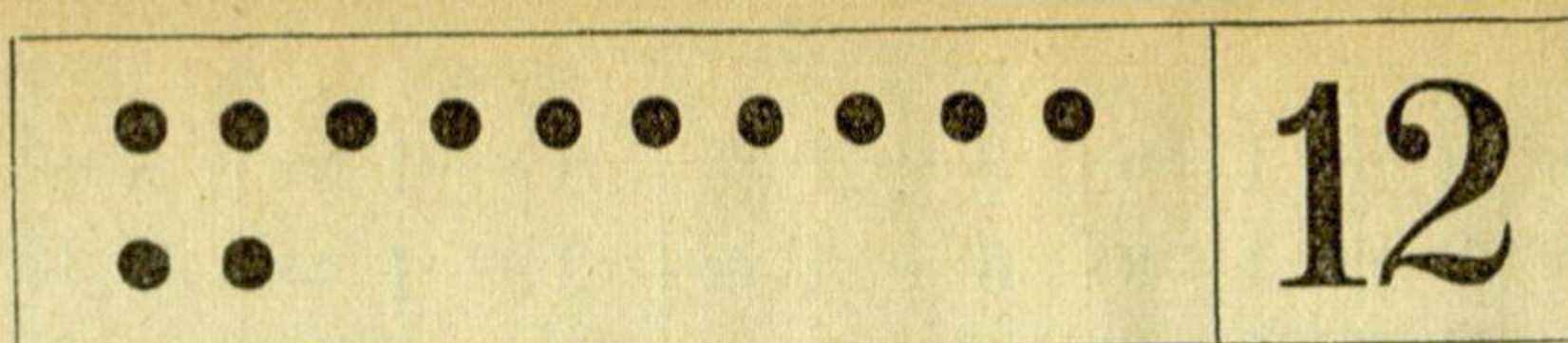
$5 \times 2 =$	$4 \times 1 =$	$6 = . \times 3$	$2 \times 4 + 3 =$
$2 \times 4 =$	$3 \times 2 =$	$8 = . \times 2$	$3 \times 2 + 5 =$
$3 \times 3 =$	$1 \times 9 =$	$10 = . \times 5$	$1 \times 5 + 4 =$
$4 \times 2 =$	$2 \times 2 =$	$9 = 3 \times .$	$5 \times 2 - 7 =$
$2 \times 3 =$	$2 \times 5 =$	$4 = 4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

— 6. —

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

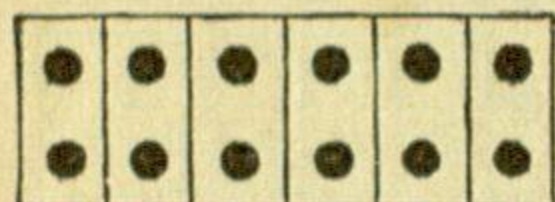
— 7. —

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



$12 \times 1 =$

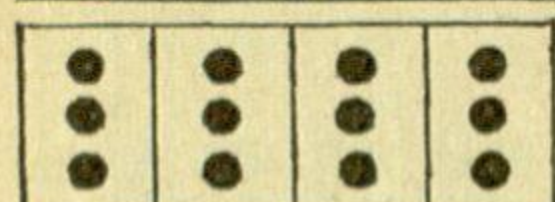
$1 \text{ in } 12 =$



$6 \times 2 =$

$2 \text{ in } 12 =$

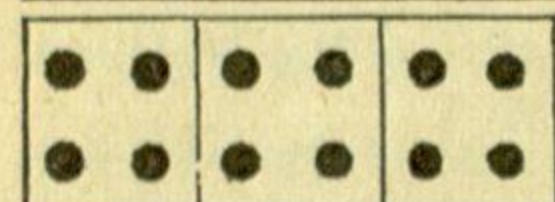
$\frac{1}{6} \text{ v. } 12 =$



$4 \times 3 =$

$3 \text{ in } 12 =$

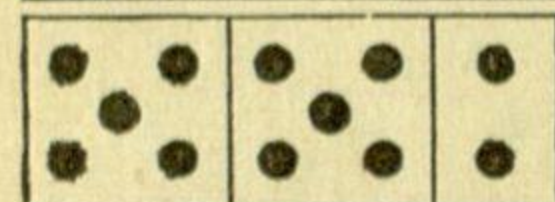
$\frac{1}{4} \text{ v. } 12 =$



$3 \times 4 =$

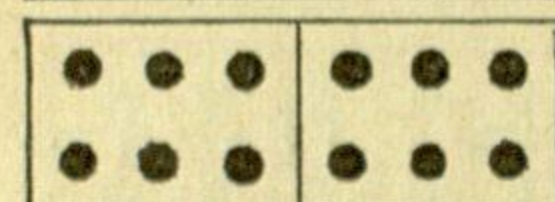
$4 \text{ in } 12 =$

$\frac{1}{3} \text{ v. } 12 =$



$2 \times 5 + 2 =$

$5 \text{ in } 12 =$



$6 + 6 =$

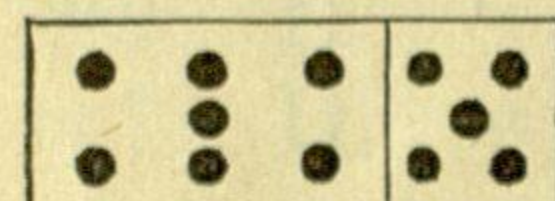
$12 - 6 =$

$12 = 6 +$

$2 \times 6 =$

$6 \text{ in } 12 =$

$\frac{1}{2} \text{ v. } 12 =$



$7 + 5 =$

$12 - 5 =$

$12 = 7 +$

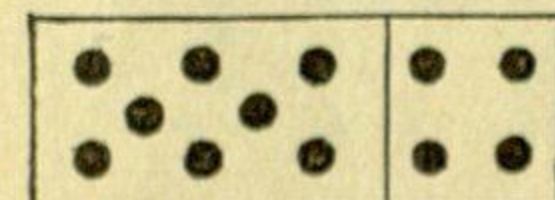
$5 + 7 =$

$12 - 7 =$

$12 = 5 +$

$1 \times 7 + 5 =$

$7 \text{ in } 12 =$



$8 + 4 =$

$12 - 4 =$

$12 = 8 +$

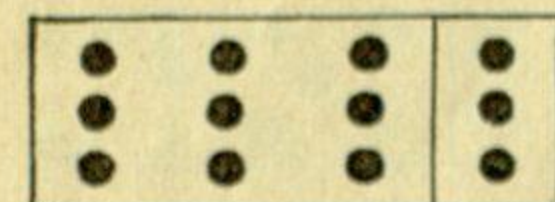
$4 + 8 =$

$12 - 8 =$

$12 = 4 +$

$1 \times 8 + 4 =$

$8 \text{ in } 12 =$



$9 + 3 =$

$12 - 3 =$

$12 = 9 +$

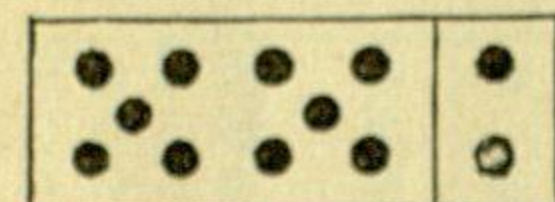
$3 + 9 =$

$12 - 9 =$

$12 = 3 +$

$1 \times 9 + 3 =$

$9 \text{ in } 12 =$



$10 + 2 =$

$12 - 2 =$

$12 = 10 +$

$2 + 10 =$

$12 - 10 =$

$12 = 2 +$

$1 \times 10 + 2 =$

$10 \text{ in } 12 =$

— 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. —

$3 + 2 =$

$10 + 2 =$

$2 + 2 =$

$11 - 2 =$

$8 - 2 =$

$1 + 2 =$

$5 + 2 =$

$7 + 2 =$

$3 - 2 =$

$12 - 2 =$

$6 + 2 =$

$8 + 2 =$

$9 - 2 =$

$7 - 2 =$

$6 - 2 =$

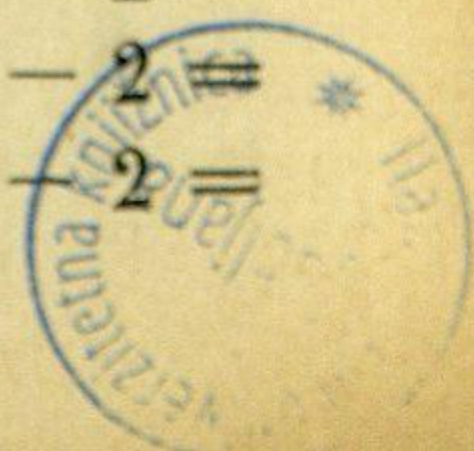
$4 + 2 =$

$6 + 2 =$

$5 - 2 =$

$10 - 2 =$

$4 - 2 =$



— 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. —

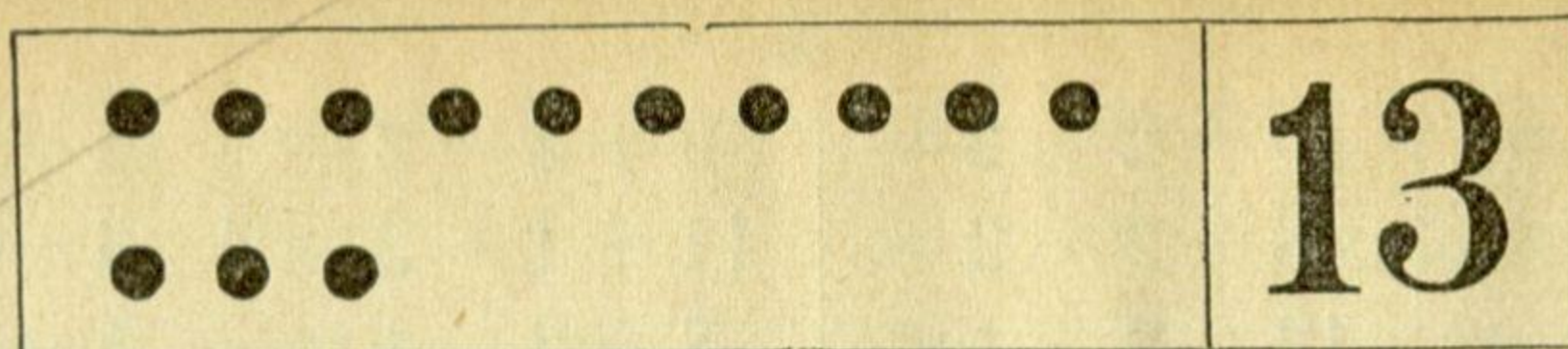
$2 \text{ in } 4 =$	$2 \text{ in } 8 =$	$2 \text{ in } 9 =$	$2 \text{ in } 10 =$	$2 \text{ in } 12 =$
$3 \text{ in } 4 =$	$3 \text{ in } 8 =$	$3 \text{ in } 9 =$	$3 \text{ in } 10 =$	$3 \text{ in } 12 =$
$2 \text{ in } 6 =$	$4 \text{ in } 8 =$	$5 \text{ in } 9 =$	$4 \text{ in } 10 =$	$4 \text{ in } 12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

— 7. —

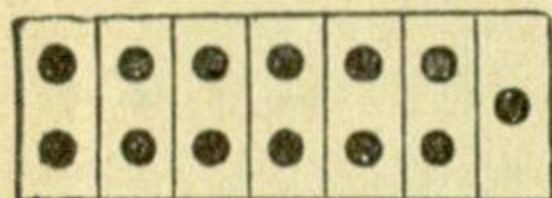
$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{9} \text{ v. } 9 =$	$\frac{1}{2} \text{ v. } 12 =$
$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{4} \text{ v. } 8 =$	$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{3} \text{ v. } 12 =$
$\frac{1}{6} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$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

— 8. —

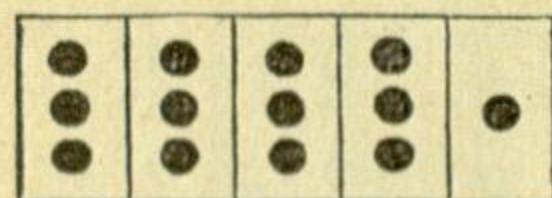
$2 \times 5 + 2 =$	$5 \times 2 + 1 =$	$\frac{1}{4} \text{ v. } 8 + 9 =$
$6 \times 2 - 3 =$	$4 \times 3 - 5 =$	$\frac{1}{2} \text{ v. } 10 - 4 =$
$3 \times 3 + 3 =$	$3 \times 2 + 6 =$	$\frac{1}{6} \text{ v. } 12 + 5 =$
$3 \times 4 - 4 =$	$2 \times 6 - 7 =$	$\frac{1}{4} \text{ v. } 12 - 3 =$



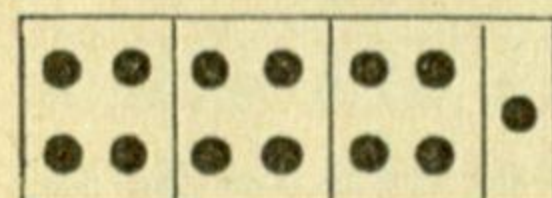
$$13 \times 1 = \quad | \quad 1 \text{ in } 13 =$$



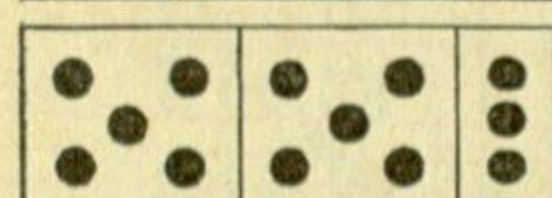
$$6 \times 2 + 1 = \quad | \quad 2 \text{ in } 13 =$$



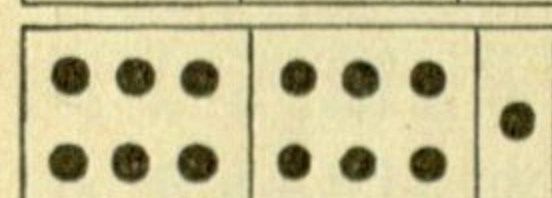
$$4 \times 3 + 1 = \quad | \quad 3 \text{ in } 13 =$$



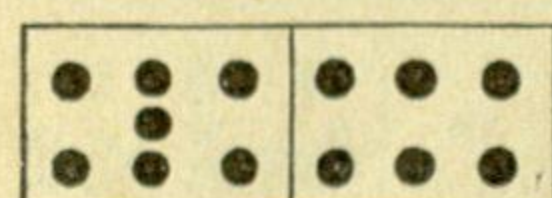
$$3 \times 4 + 1 = \quad | \quad 4 \text{ in } 13 =$$



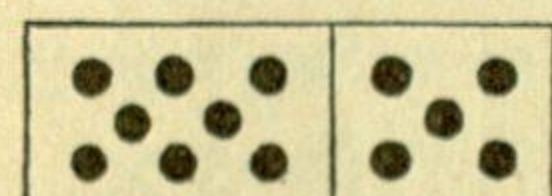
$$2 \times 5 + 3 = \quad | \quad 5 \text{ in } 13 =$$



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



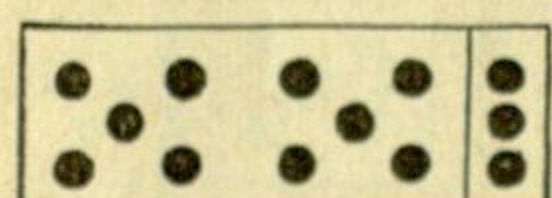
$$\begin{array}{l} 7 + 6 = \quad | \quad 13 - 6 = \quad | \quad 13 = 7 + . \\ 6 + 7 = \quad | \quad 13 - 7 = \quad | \quad 13 = 6 + . \\ 1 \times 7 + 6 = \quad | \quad 7 \text{ in } 13 = \end{array}$$



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



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



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

— 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. —

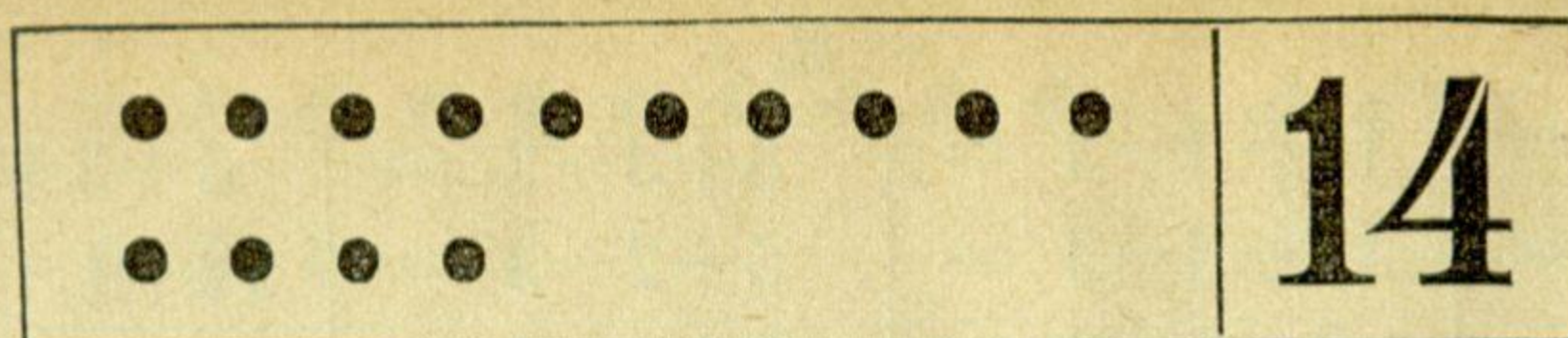
$2 \text{ in } 10 =$	$3 \text{ in } 6 =$	$4 \text{ in } 8 =$	$6 \text{ in } 6 =$
$2 \text{ in } 4 =$	$3 \text{ in } 12 =$	$4 \text{ in } 12 =$	$6 \text{ in } 12 =$
$2 \text{ in } 6 =$	$3 \text{ in } 3 =$	$5 \text{ in } 5 =$	$7 \text{ in } 11 =$
$2 \text{ in } 8 =$	$3 \text{ in } 9 =$	$5 \text{ in } 10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

— 7. —

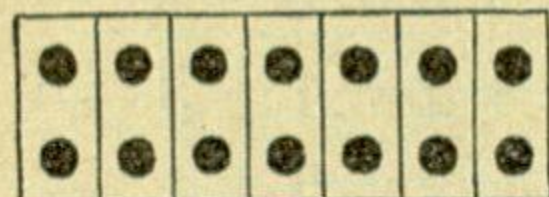
$\frac{1}{2} \text{ v. } 10 =$	$\frac{1}{2} \text{ v. } 6 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{5} \text{ v. } 10 =$
$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{2} \text{ v. } 2 =$	$\frac{1}{4} \text{ v. } 4 =$	$\frac{1}{5} \text{ v. } 5 =$
$\frac{1}{2} \text{ v. } 4 =$	$\frac{1}{3} \text{ v. } 9 =$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

— 8. —

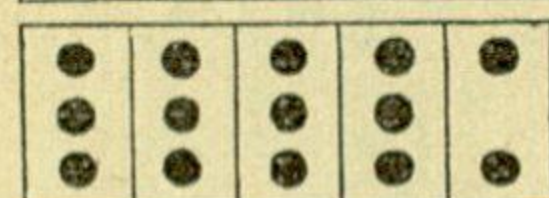
$2 \times 3 + 7 =$	$2 \times 6 - 5 =$	$\frac{1}{3} \text{ v. } 12 + 9 =$
$4 \times 2 + 4 =$	$4 \times 3 - 6 =$	$\frac{1}{2} \text{ v. } 12 - 5 =$
$3 \times 3 + 3 =$	$5 \times 2 - 8 =$	$\frac{1}{2} \text{ v. } 10 + 7 =$
$2 \times 2 + 9 =$	$2 \times 4 - 3 =$	$\frac{1}{3} \text{ v. } 12 - 3 =$



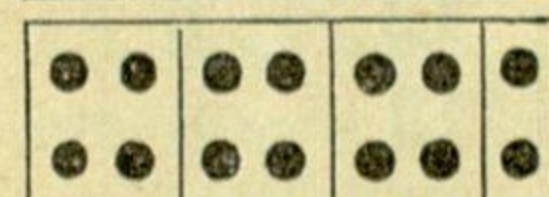
$$14 \times 1 = \quad | \quad 1 \text{ in } 14 =$$



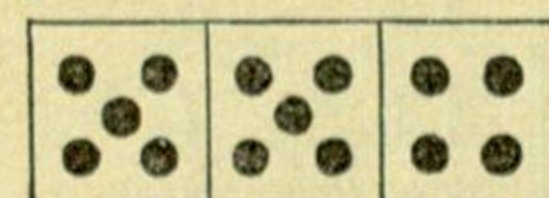
$$7 \times 2 = \quad | \quad 2 \text{ in } 14 = \quad | \quad \frac{1}{7} \text{ v. } 14 =$$



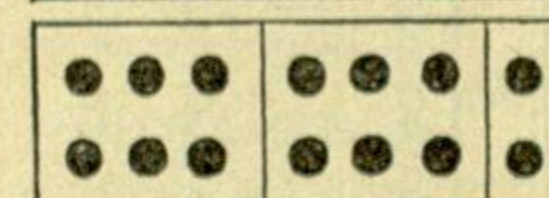
$$4 \times 3 + 2 = \quad | \quad 3 \text{ in } 14 =$$



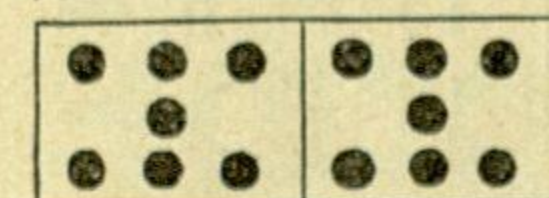
$$3 \times 4 + 2 = \quad | \quad 4 \text{ in } 14 =$$



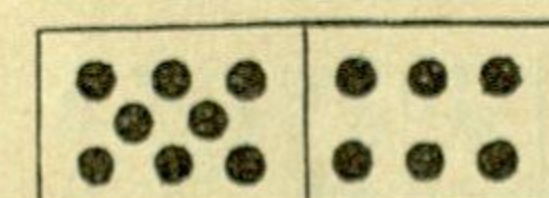
$$2 \times 5 + 4 = \quad | \quad 5 \text{ in } 14 =$$



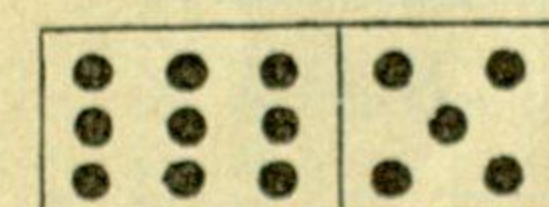
$$2 \times 6 + 2 = \quad | \quad 6 \text{ in } 14 =$$



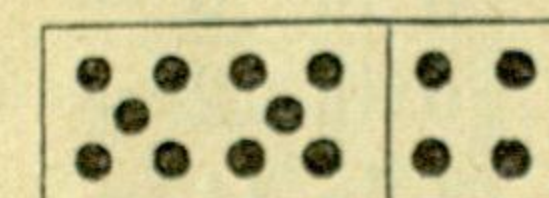
$$\begin{array}{l} 7 + 7 = \\ 2 \times 7 = \end{array} \quad | \quad \begin{array}{l} 14 - 7 = \\ 7 \text{ in } 14 = \end{array} \quad | \quad \begin{array}{l} 14 = 7 + \\ \frac{1}{2} \text{ v. } 14 = \end{array}$$



$$\begin{array}{l} 8 + 6 = \\ 6 + 8 = \end{array} \quad | \quad \begin{array}{l} 14 - 6 = \\ 14 - 8 = \end{array} \quad | \quad \begin{array}{l} 14 = 8 + \\ 14 = 6 + \end{array} \quad | \quad \begin{array}{l} 1 \times 8 + 6 = \\ 8 \text{ in } 14 = \end{array}$$



$$\begin{array}{l} 9 + 5 = \\ 5 + 9 = \end{array} \quad | \quad \begin{array}{l} 14 - 5 = \\ 14 - 9 = \end{array} \quad | \quad \begin{array}{l} 14 = 9 + \\ 14 = 5 + \end{array} \quad | \quad \begin{array}{l} 1 \times 9 + 5 = \\ 9 \text{ in } 14 = \end{array}$$



$$\begin{array}{l} 10 + 4 = \\ 4 + 10 = \end{array} \quad | \quad \begin{array}{l} 14 - 4 = \\ 14 - 10 = \end{array} \quad | \quad \begin{array}{l} 14 = 10 + \\ 14 = 4 + \end{array} \quad | \quad \begin{array}{l} 1 \times 10 + 4 = \\ 10 \text{ in } 14 = \end{array}$$

— 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. —

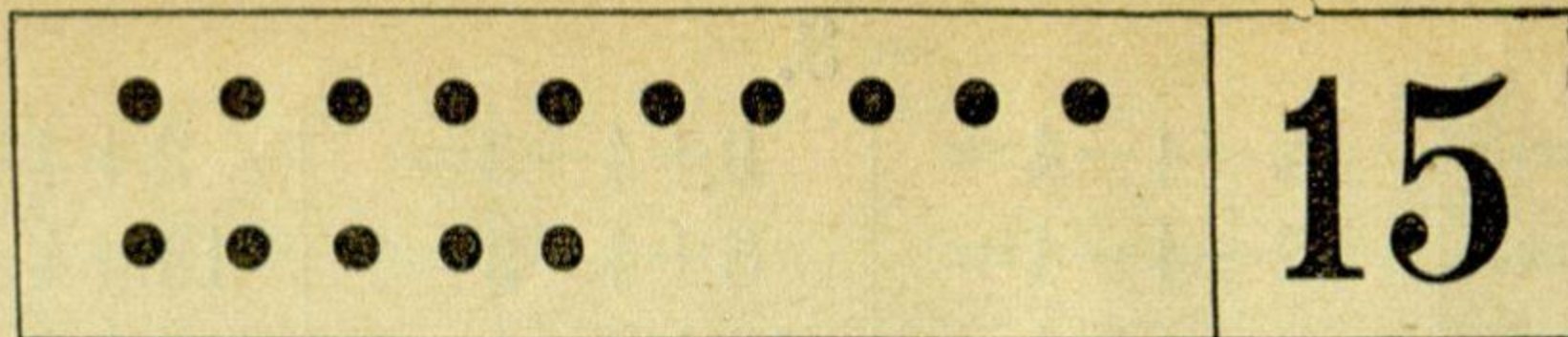
$2 \text{ in } 6 =$	$3 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 13 =$
$4 \text{ in } 12 =$	$2 \text{ in } 8 =$	$2 \text{ in } 4 =$	$3 \text{ in } 10 =$
$7 \text{ in } 14 =$	$4 \text{ in } 8 =$	$3 \text{ in } 3 =$	$4 \text{ in } 14 =$
$3 \text{ in } 9 =$	$2 \text{ in } 10 =$	$2 \text{ in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

— 7. —

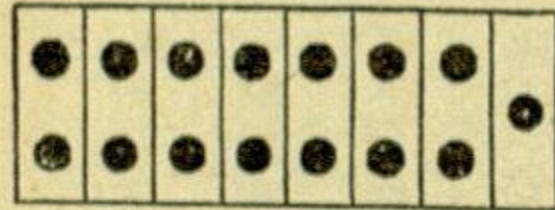
$\frac{1}{3} \text{ v. } 6 =$	$\frac{1}{8} \text{ v. } 8 =$	$\frac{1}{3} \text{ v. } 12 =$	$\frac{1}{2} \text{ v. } 10 =$
$\frac{1}{5} \text{ v. } 10 =$	$\frac{1}{6} \text{ v. } 12 =$	$\frac{1}{7} \text{ v. } 14 =$	$\frac{1}{4} \text{ v. } 8 =$
$\frac{1}{4} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. }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

— 8. —

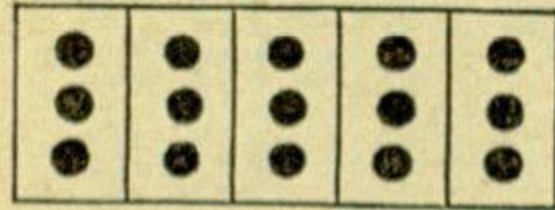
$3 \times 3 + 5 =$	$5 \times 2 + 4 =$	$\frac{1}{7} \text{ v. } 14 + 8 =$
$2 \times 7 - 6 =$	$2 \times 6 - 9 =$	$\frac{1}{3} \text{ v. } 12 - 3 =$
$4 \times 2 + 4 =$	$2 \times 2 + 7 =$	$\frac{1}{2} \text{ v. } 4 + 5 =$
$2 \times 4 - 3 =$	$7 \times 2 - 8 =$	$\frac{1}{2} \text{ v. } 14 - 2 =$



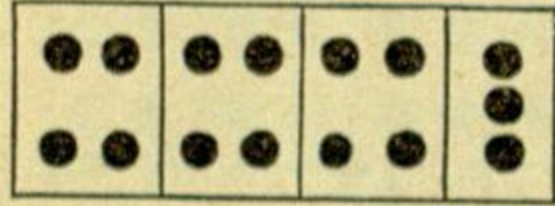
$$15 \times 1 = \quad | \quad 1 \text{ in } 15 =$$



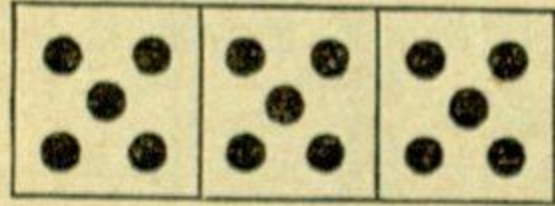
$$7 \times 2 + 1 = \quad | \quad 2 \text{ in } 15 =$$



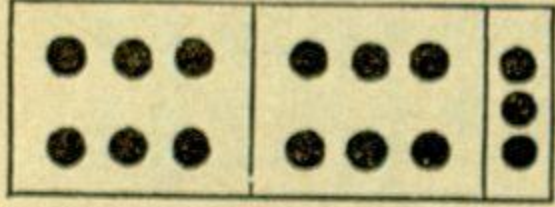
$$5 \times 3 = \quad | \quad 3 \text{ in } 15 = \quad | \quad \frac{1}{5} \text{ v. } 15 =$$



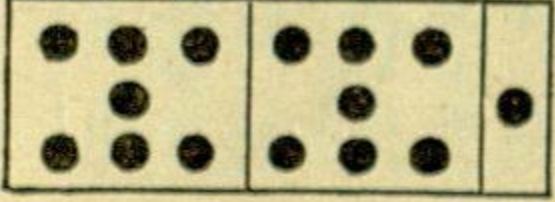
$$3 \times 4 + 3 = \quad | \quad 4 \text{ in } 15 =$$



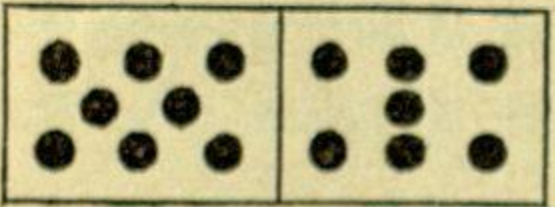
$$3 \times 5 = \quad | \quad 5 \text{ in } 15 = \quad | \quad \frac{1}{3} \text{ v. } 15 =$$



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



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



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



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



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

— 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. —

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

— 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. —

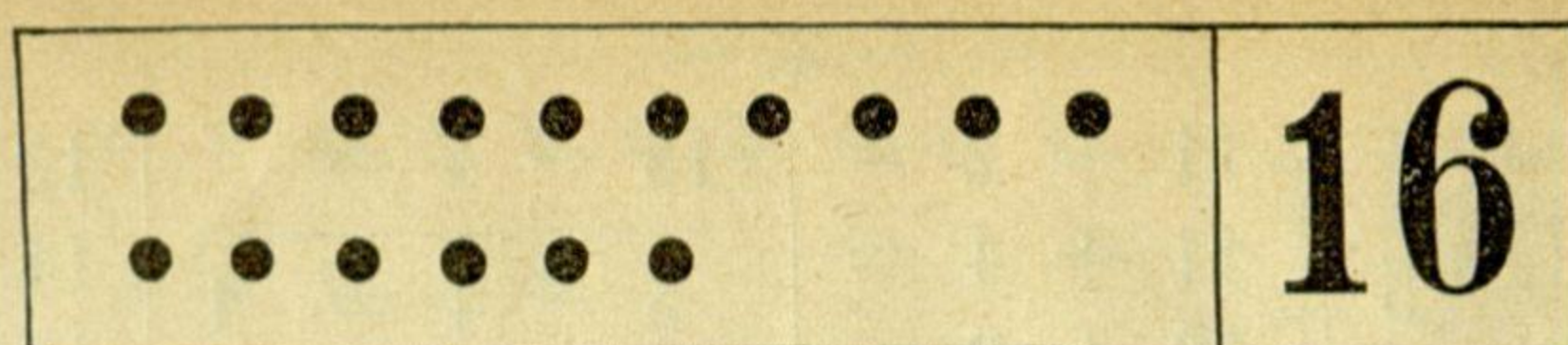
$2 \text{ in } 8 =$	$2 \text{ in } 10 =$	$2 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 15 =$
$3 \text{ in } 8 =$	$3 \text{ in } 10 =$	$3 \text{ in } 12 =$	$3 \text{ in } 14 =$	$3 \text{ in } 15 =$
$4 \text{ in } 8 =$	$4 \text{ in } 10 =$	$4 \text{ in } 12 =$	$5 \text{ in } 14 =$	$4 \text{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

— 8. —

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

— 9. —

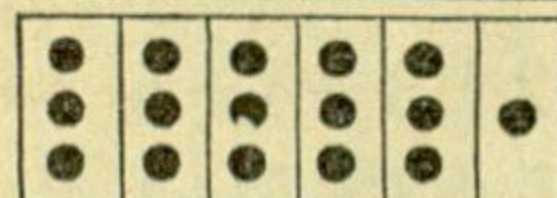
$5 \times 2 + 5 =$	$3 \times 5 - 4 =$	$\frac{1}{5} \text{ v. } 15 + 5 =$
$2 \times 6 - 3 =$	$4 \times 3 + 3 =$	$\frac{1}{2} \text{ v. } 14 - 3 =$
$7 \times 2 + 1 =$	$2 \times 7 - 5 =$	$\frac{1}{4} \text{ v. } 12 + 9 =$



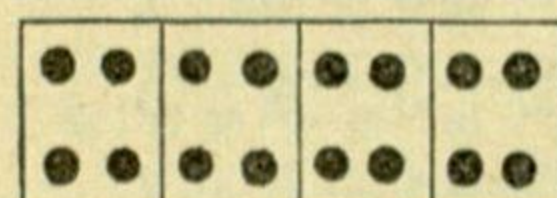
$$16 \times 1 = \quad | \quad 1 \text{ in } 16 =$$



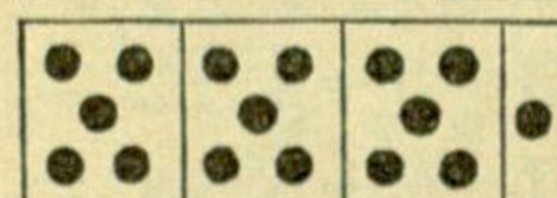
$$8 \times 2 = \quad | \quad 2 \text{ in } 16 = \quad | \quad \frac{1}{8} \text{ v. } 16 =$$



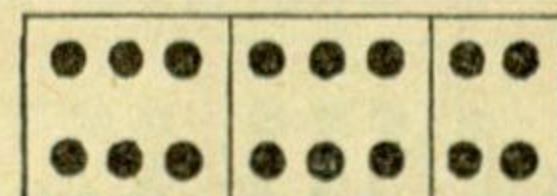
$$5 \times 3 + 1 = \quad | \quad 3 \text{ in } 16 =$$



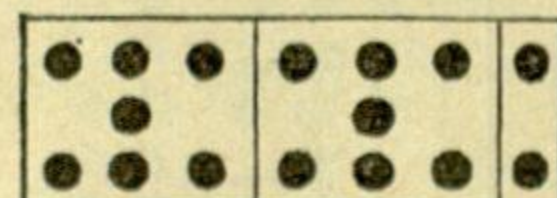
$$4 \times 4 = \quad | \quad 4 \text{ in } 16 = \quad | \quad \frac{1}{4} \text{ v. } 16 =$$



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



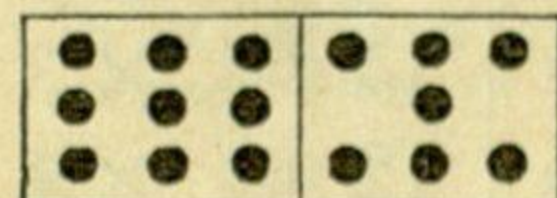
$$2 \times 6 + 4 = \quad | \quad 6 \text{ in } 16 =$$



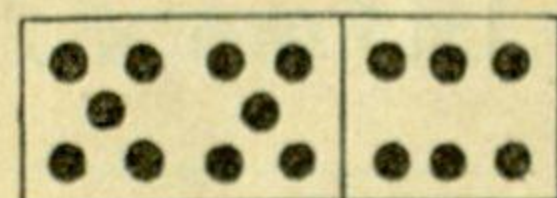
$$2 \times 7 + 2 = \quad | \quad 7 \text{ in } 16 =$$



$$\begin{array}{l} 8 + 8 = \quad | \quad 16 - 8 = \quad | \quad 16 = 8 + . \\ 2 \times 8 = \quad | \quad 8 \text{ in } 16 = \quad | \quad \frac{1}{2} \text{ v. } 16 = \end{array}$$



$$\begin{array}{l} 9 + 7 = \quad | \quad 16 - 7 = \quad | \quad 16 = 9 + . \\ 7 + 9 = \quad | \quad 16 - 9 = \quad | \quad 16 = 7 + . \\ 1 \times 9 + 7 = \quad | \quad 9 \text{ in } 16 = \end{array}$$



$$\begin{array}{l} 10 + 6 = \quad | \quad 16 - 6 = \quad | \quad 16 = 10 + . \\ 6 + 10 = \quad | \quad 16 - 10 = \quad | \quad 16 = 6 + . \\ 1 \times 10 + 6 = \quad | \quad 10 \text{ in } 16 = \end{array}$$

- 1. -

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

- 2. -

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

— 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. —

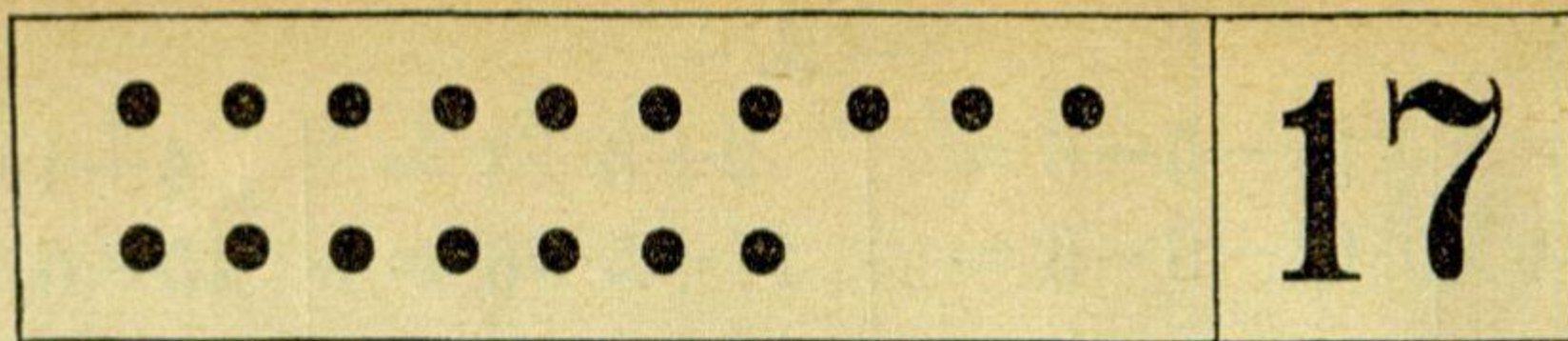
$2 \text{ in } 14 =$	$3 \text{ in } 12 =$	$4 \text{ in } 16 =$	$3 \text{ in } 11 =$	$2 \text{ in } 7 =$
$8 \text{ in } 16 =$	$2 \text{ in } 6 =$	$5 \text{ in } 10 =$	$5 \text{ in } 13 =$	$4 \text{ in } 13 =$
$5 \text{ in } 10 =$	$6 \text{ in } 12 =$	$3 \text{ in } 15 =$	$7 \text{ in } 16 =$	$6 \text{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

— 7. —

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

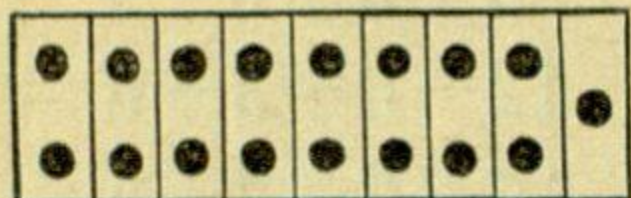
— 8. —

$4 \times 3 + 3 =$	$8 \times 2 - 6 =$	$\frac{1}{8} \text{ v. } 16 + 5 =$
$7 \times 2 - 5 =$	$2 \times 6 + 4 =$	$\frac{1}{3} \text{ v. } 15 - 3 =$
$3 \times 5 + 1 =$	$4 \times 4 - 5 =$	$\frac{1}{4} \text{ v. } 12 + 6 =$
$2 \times 8 - 4 =$	$5 \times 2 + 3 =$	$\frac{1}{2} \text{ v. } 16 - 4 =$



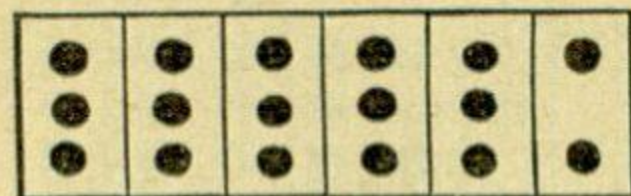
$17 \times 1 =$

$1 \text{ in } 17 =$



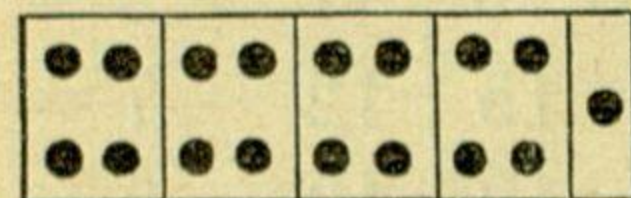
$8 \times 2 + 1 =$

$2 \text{ in } 17 =$



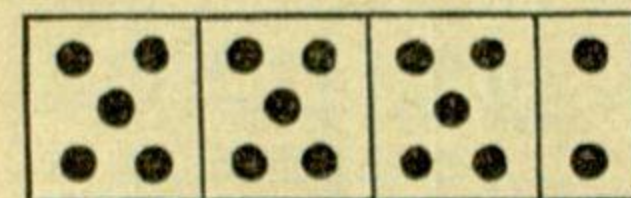
$5 \times 3 + 2 =$

$3 \text{ in } 17 =$



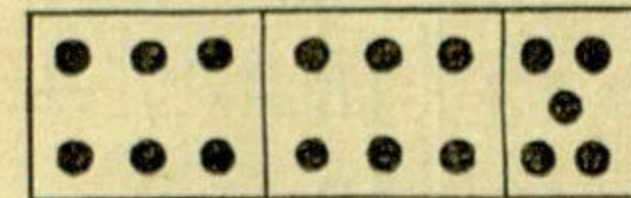
$4 \times 4 + 1 =$

$4 \text{ in } 17 =$



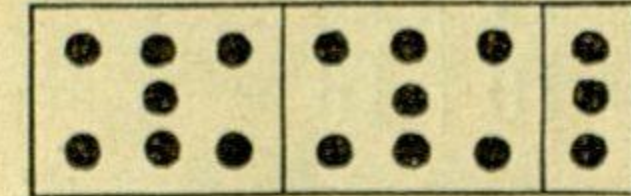
$3 \times 5 + 2 =$

$5 \text{ in } 17 =$



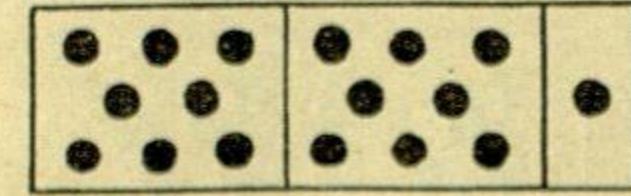
$2 \times 6 + 5 =$

$6 \text{ in } 17 =$



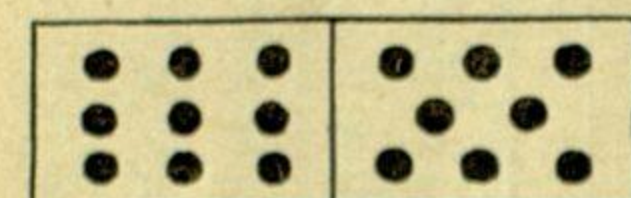
$2 \times 7 + 3 =$

$7 \text{ in } 17 =$



$2 \times 8 + 1 =$

$8 \text{ in } 17 =$



$9 + 8 =$

$17 - 8 =$

$17 = 9 +$

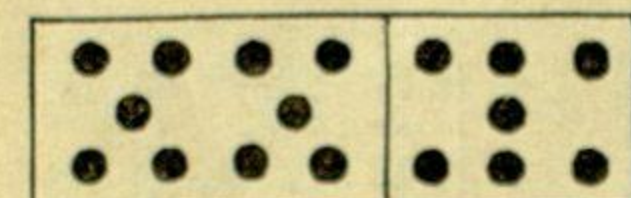
$8 + 9 =$

$17 - 9 =$

$17 = 8 +$

$1 \times 9 + 8 =$

$9 \text{ in } 17 =$



$10 + 7 =$

$17 - 7 =$

$17 = 10 +$

$7 + 10 =$

$17 - 10 =$

$17 = 7 +$

$1 \times 10 + 7 =$

$10 \text{ in } 17 =$

— 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. —

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

— 6. —

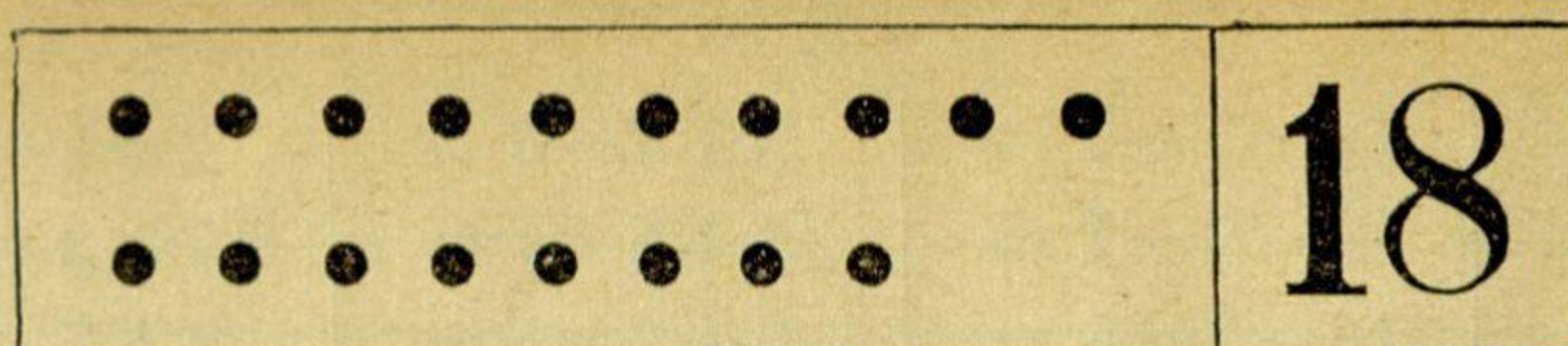
$2 \text{ in } 16 =$	$2 \text{ in } 14 =$	$3 \text{ in } 12 =$	$5 \text{ in } 10 =$	$3 \text{ in } 17 =$
$2 \text{ in } 6 =$	$2 \text{ in } 4 =$	$4 \text{ in } 8 =$	$6 \text{ in } 12 =$	$4 \text{ in } 13 =$
$2 \text{ in } 12 =$	$3 \text{ in } 9 =$	$4 \text{ in } 16 =$	$7 \text{ in } 14 =$	$6 \text{ in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

— 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. —

$2 \times 2 + 8 =$	$2 \times 7 - 3 =$	$\frac{1}{2} \text{ v. } 6 + 4 =$
$6 \times 2 + 5 =$	$4 \times 4 - 5 =$	$\frac{1}{3} \text{ v. } 9 + 7 =$
$3 \times 3 + 7 =$	$8 \times 2 - 7 =$	$\frac{1}{2} \text{ v. } 14 - 7 =$
$2 \times 5 + 6 =$	$4 \times 3 - 6 =$	$\frac{1}{4} \text{ v. } 16 - 3 =$



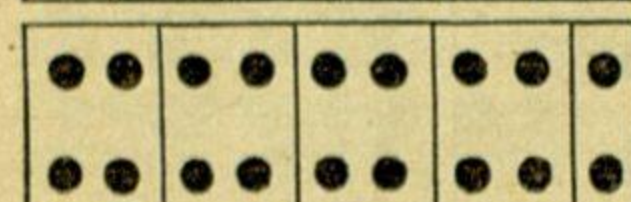
$$18 \times 1 = \quad | \quad 1 \text{ in } 18 =$$



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



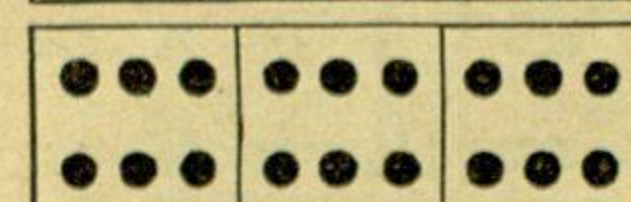
$$6 \times 3 = \quad | \quad 3 \text{ in } 18 = \quad | \quad \frac{1}{6} \text{ v. } 18 =$$



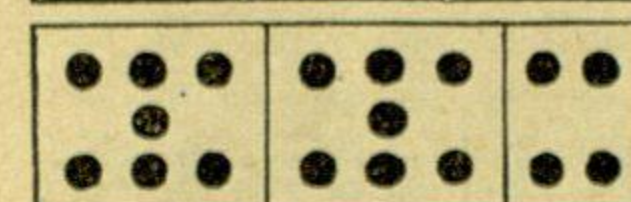
$$4 \times 4 + 2 = \quad | \quad 4 \text{ in } 18 =$$



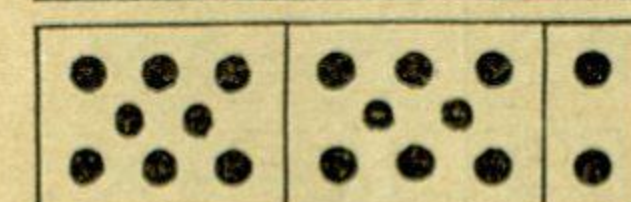
$$3 \times 5 + 3 = \quad | \quad 5 \text{ in } 18 =$$



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



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



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



$$\begin{array}{l} 9 + 9 = \quad | \quad 18 - 9 = \quad | \quad 18 = 9 + . \\ 2 \times 9 = \quad | \quad 9 \text{ in } 18 = \quad | \quad \frac{1}{2} \text{ v. } 18 = \end{array}$$



$$\begin{array}{l} 10 + 8 = \quad | \quad 18 - 8 = \quad | \quad 18 = 10 + . \\ 8 + 10 = \quad | \quad 18 - 10 = \quad | \quad 18 = 8 + . \end{array}$$

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

— 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 =
6 + 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. -

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

- 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. -

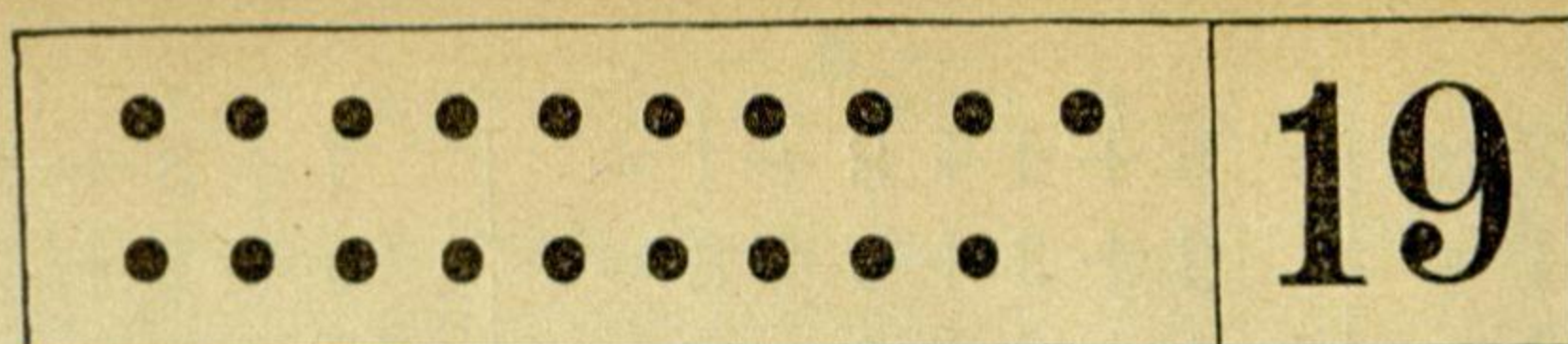
$2 \text{ in } 12 =$	$2 \text{ in } 14 =$	$2 \text{ in } 16 =$	$2 \text{ in } 18 =$	$3 \text{ in } 10 =$
$3 \text{ in } 12 =$	$7 \text{ in } 14 =$	$4 \text{ in } 16 =$	$3 \text{ in } 18 =$	$4 \text{ in } 14 =$
$4 \text{ in } 12 =$	$3 \text{ in } 15 =$	$8 \text{ in } 16 =$	$6 \text{ in } 18 =$	$5 \text{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

- 7. -

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

- 8. -

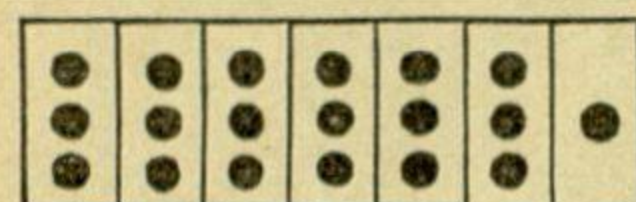
$3 \times 2 + 8 =$	$4 \times 3 + 5 =$	$\frac{1}{2} \text{ v. } 10 + 8 =$
$4 \times 4 - 7 =$	$3 \times 6 - 6 =$	$\frac{1}{3} \text{ v. } 12 - 2 =$
$2 \times 4 + 6 =$	$2 \times 7 + 4 =$	$\frac{1}{4} \text{ v. } 16 + 7 =$
$5 \times 3 - 5 =$	$9 \times 2 - 8 =$	$\frac{1}{2} \text{ v. } 18 - 6 =$



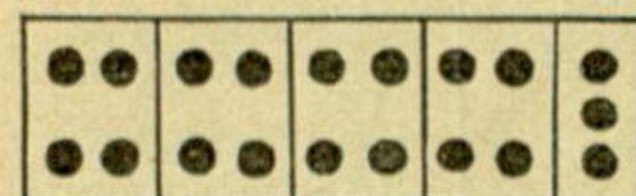
$$19 \times 1 = \quad | \quad 1 \text{ in } 19 =$$



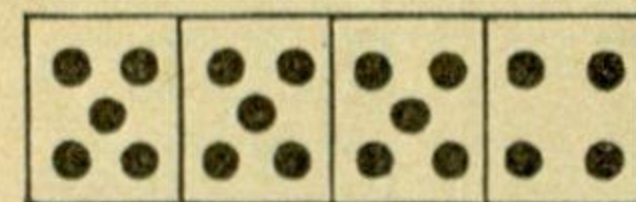
$$9 \times 2 + 1 = \quad | \quad 2 \text{ in } 19 =$$



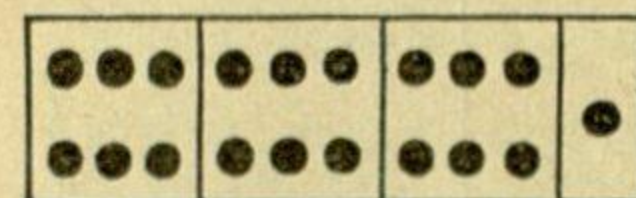
$$6 \times 3 + 1 = \quad | \quad 3 \text{ in } 19 =$$



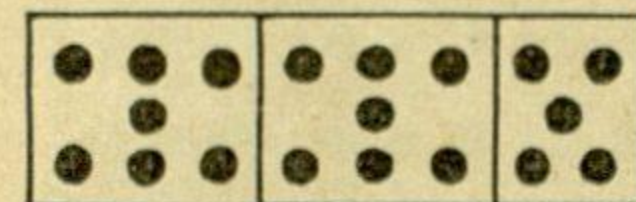
$$4 \times 4 + 3 = \quad | \quad 4 \text{ in } 19 =$$



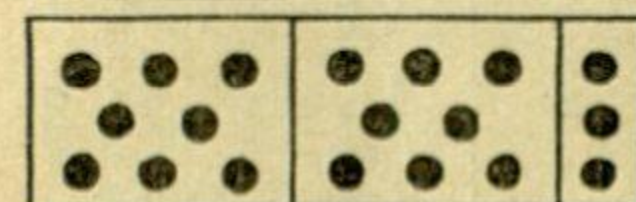
$$3 \times 5 + 4 = \quad | \quad 5 \text{ in } 19 =$$



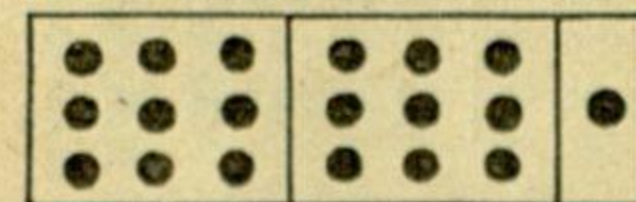
$$3 \times 6 + 1 = \quad | \quad 6 \text{ in } 19 =$$



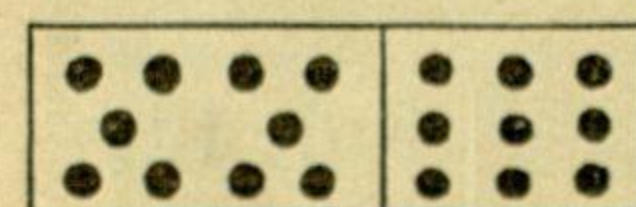
$$2 \times 7 + 5 = \quad | \quad 7 \text{ in } 19 =$$



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



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



$$10 + 9 = \quad | \quad 19 - 9 = \quad | \quad 19 = 10 +$$

$$9 + 10 = \quad | \quad 19 - 10 = \quad | \quad 19 = 9 +$$

$$1 \times 10 + 9 = \quad | \quad 10 \text{ in } 19 =$$

— 1. —

$$1 + 9 = \quad | \quad 6 + 9 = \quad | \quad 10 - 9 = \quad | \quad 15 - 9 =$$

$$2 + 9 = \quad | \quad 7 + 9 = \quad | \quad 11 - 9 = \quad | \quad 16 - 9 =$$

$$3 + 9 = \quad | \quad 8 + 9 = \quad | \quad 12 - 9 = \quad | \quad 17 - 9 =$$

$$4 + 9 = \quad | \quad 9 + 9 = \quad | \quad 13 - 9 = \quad | \quad 18 - 9 =$$

$$5 + 9 = \quad | \quad 10 + 9 = \quad | \quad 14 - 9 = \quad | \quad 19 - 9 =$$

— 2. —

$$3 + 9 = \quad | \quad 7 + 9 = \quad | \quad 15 - 9 = \quad | \quad 11 + 8 = \quad | \quad 6 + 7 =$$

$$8 + 9 = \quad | \quad 4 + 9 = \quad | \quad 11 - 9 = \quad | \quad 5 + 8 = \quad | \quad 12 + 7 =$$

$$6 + 9 = \quad | \quad 1 + 9 = \quad | \quad 18 - 9 = \quad | \quad 9 + 8 = \quad | \quad 16 - 7 =$$

$$2 + 9 = \quad | \quad 13 - 9 = \quad | \quad 12 - 9 = \quad | \quad 13 - 8 = \quad | \quad 11 - 7 =$$

$$5 + 9 = \quad | \quad 17 - 9 = \quad | \quad 16 - 9 = \quad | \quad 16 - 8 = \quad | \quad 19 - 7 =$$

— 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. —

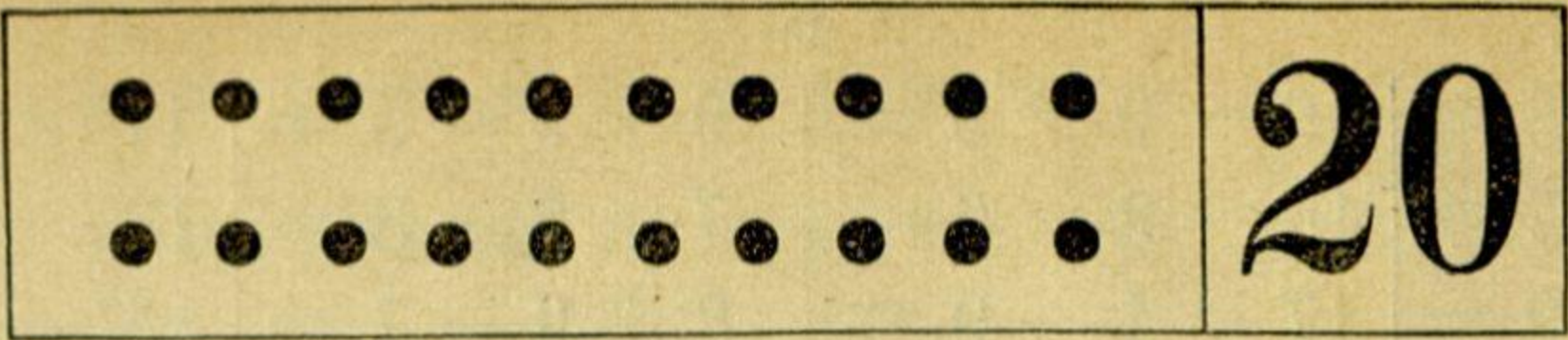
$2 \text{ in } 16 =$	$3 \text{ in } 12 =$	$4 \text{ in } 16 =$	$5 \text{ in } 15 =$	$7 \text{ in } 10 =$
$2 \text{ in } 10 =$	$3 \text{ in } 9 =$	$4 \text{ in } 8 =$	$5 \text{ in } 19 =$	$8 \text{ in } 16 =$
$2 \text{ in } 4 =$	$3 \text{ in } 18 =$	$4 \text{ in } 12 =$	$6 \text{ in } 18 =$	$8 \text{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

— 7. —

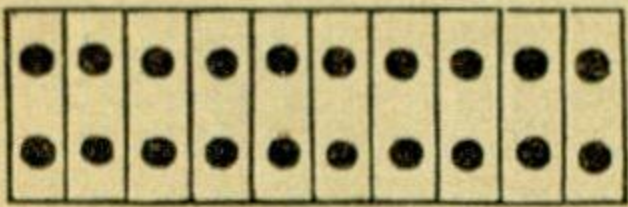
$\frac{1}{5} \text{ v. } 15 =$	$\frac{1}{2} \text{ v. } 8 =$	$\frac{1}{9} \text{ v. } 18 =$	$\frac{1}{2} \text{ v. } 10 =$
$\frac{1}{4} \text{ v. } 16 =$	$\frac{1}{6} \text{ v. } 12 =$	$\frac{1}{3} \text{ v. } 15 =$	$\frac{1}{4} \text{ v. } 12 =$
$\frac{1}{3} \text{ v. } 9 =$	$\frac{1}{2} \text{ v. }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

— 8. —

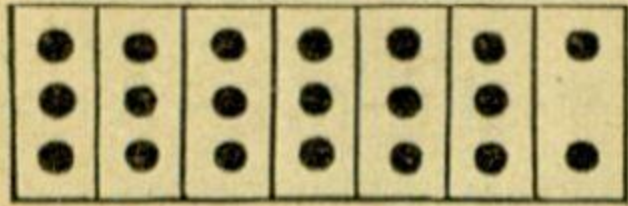
$2 \times 4 + 9 =$	$9 \times 2 - 7 =$	$\frac{1}{8} \text{ v. } 16 + 8 =$
$4 \times 3 + 7 =$	$5 \times 3 - 8 =$	$\frac{1}{5} \text{ v. } 15 + 9 =$
$2 \times 7 + 3 =$	$3 \times 6 - 5 =$	$\frac{1}{2} \text{ v. } 18 - 7 =$
$3 \times 3 + 8 =$	$4 \times 4 - 9 =$	$\frac{1}{4} \text{ v. } 16 - 2 =$



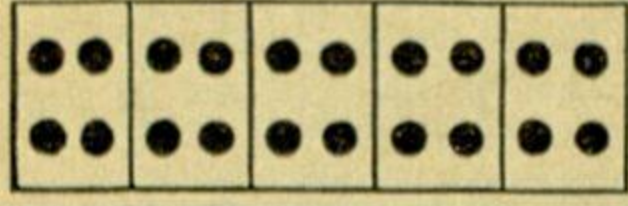
$20 \times 1 =$ | $1 \text{ in } 20 =$



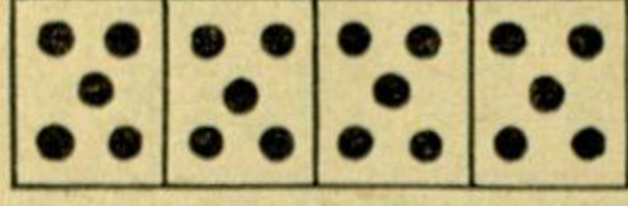
$10 \times 2 =$ | $2 \text{ in } 20 =$ | $\frac{1}{10} \text{ v. } 20 =$



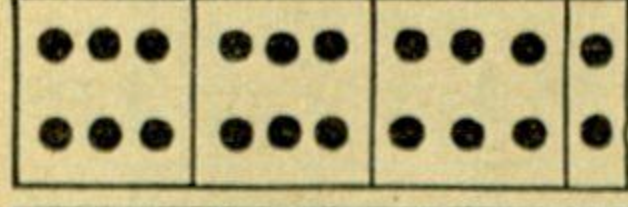
$6 \times 3 + 2 =$ | $3 \text{ in } 20 =$



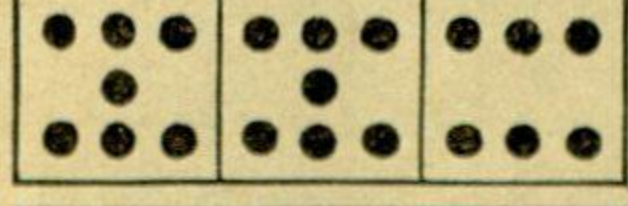
$5 \times 4 =$ | $4 \text{ in } 20 =$ | $\frac{1}{5} \text{ v. } 20 =$



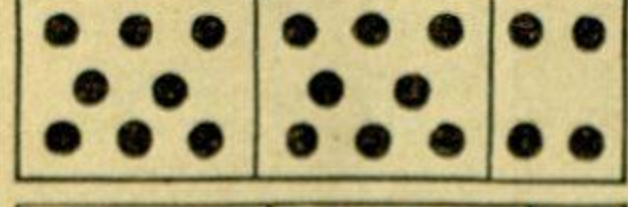
$4 \times 5 =$ | $5 \text{ in } 20 =$ | $\frac{1}{4} \text{ v. } 20 =$



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



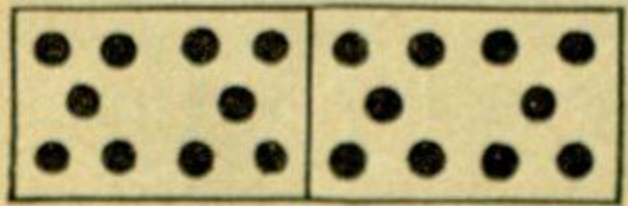
$2 \times 7 + 6 =$ | $7 \text{ in } 20 =$



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



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



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

— 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. —

$2 + 1 =$	$4 + 6 =$	$10 + 10 =$	$6 + 3 =$	$4 + 7 =$
$3 - 2 =$	$10 - 3 =$	$20 - 7 =$	$9 - 4 =$	$17 - 8 =$
$1 + 4 =$	$7 + 8 =$	$13 + 2 =$	$5 + 5 =$	$3 + 9 =$
$5 - 1 =$	$15 - 5 =$	$15 - 9 =$	$10 - 6 =$	$12 - 10 =$

— 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. —

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

— 9. —

$2 \text{ in } 6 =$	$2 \text{ in } 20 =$	$3 \text{ in } 18 =$	$5 \text{ in } 20 =$	$8 \text{ in } 8 =$
$2 \text{ in } 10 =$	$2 \text{ in } 16 =$	$3 \text{ in } 9 =$	$5 \text{ in } 15 =$	$8 \text{ in } 16 =$
$2 \text{ in } 18 =$	$2 \text{ in } 8 =$	$4 \text{ in } 12 =$	$5 \text{ in } 10 =$	$9 \text{ in } 18 =$
$2 \text{ in } 4 =$	$3 \text{ in } 15 =$	$4 \text{ in } 20 =$	$6 \text{ in } 18 =$	$9 \text{ in } 9 =$
$2 \text{ in } 14 =$	$3 \text{ in } 6 =$	$4 \text{ in } 16 =$	$6 \text{ in } 12 =$	$10 \text{ in } 10 =$
$2 \text{ in } 12 =$	$3 \text{ in } 12 =$	$4 \text{ in } 8 =$	$7 \text{ in } 14 =$	$10 \text{ in } 20 =$

— 10. —

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

— 11. —

$\frac{1}{4} \text{ v. } 8 + 10 =$	$\frac{1}{8} \text{ v. } 16 + 9 =$	$\frac{1}{9} \text{ v. } 18 + 7 =$
$\frac{1}{2} \text{ v. } 18 - 8 =$	$\frac{1}{2} \text{ v. } 20 - 6 =$	$\frac{1}{4} \text{ v. } 20 - 3 =$
$\frac{1}{5} \text{ v. } 10 + 7 =$	$\frac{1}{7} \text{ v. } 14 + 8 =$	$\frac{1}{6} \text{ v. } 18 + 10 =$
$\frac{1}{3} \text{ v. } 15 - 3 =$	$\frac{1}{5} \text{ v. } 15 - 2 =$	$\frac{1}{2} \text{ v. } 16 - 5 =$



