Erstes Rechenbuch

für

österreichische allgemeine Volksschulen.

Von

Dr. Fr. Ritter v. Močnik.

Preis 16 h.

Wien.

Kaiserlich-königlicher Schulbücher-Verlag.

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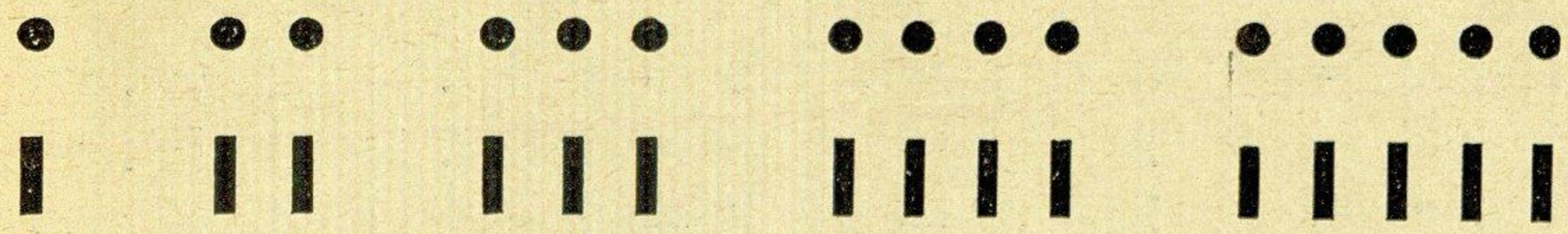
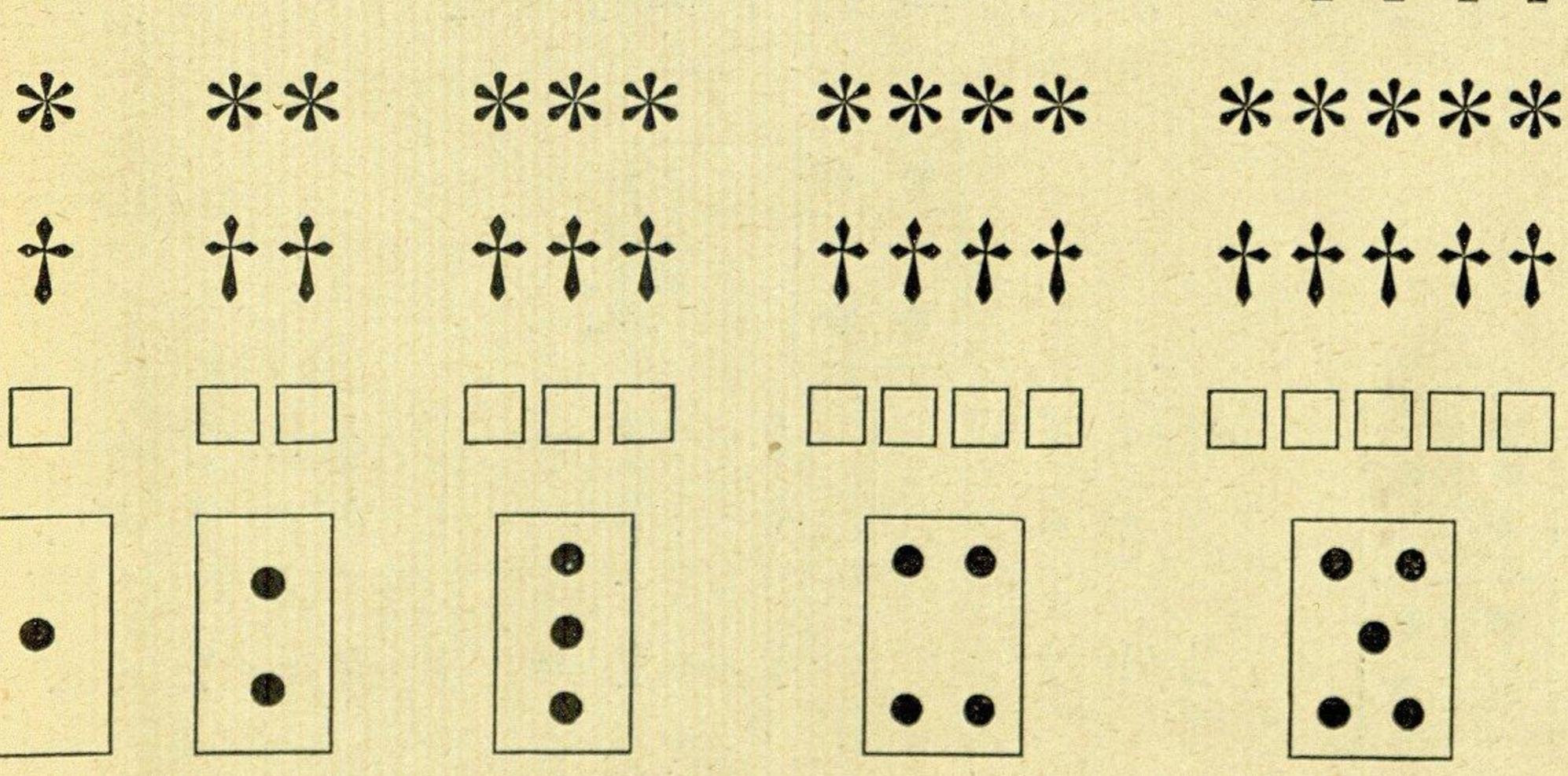
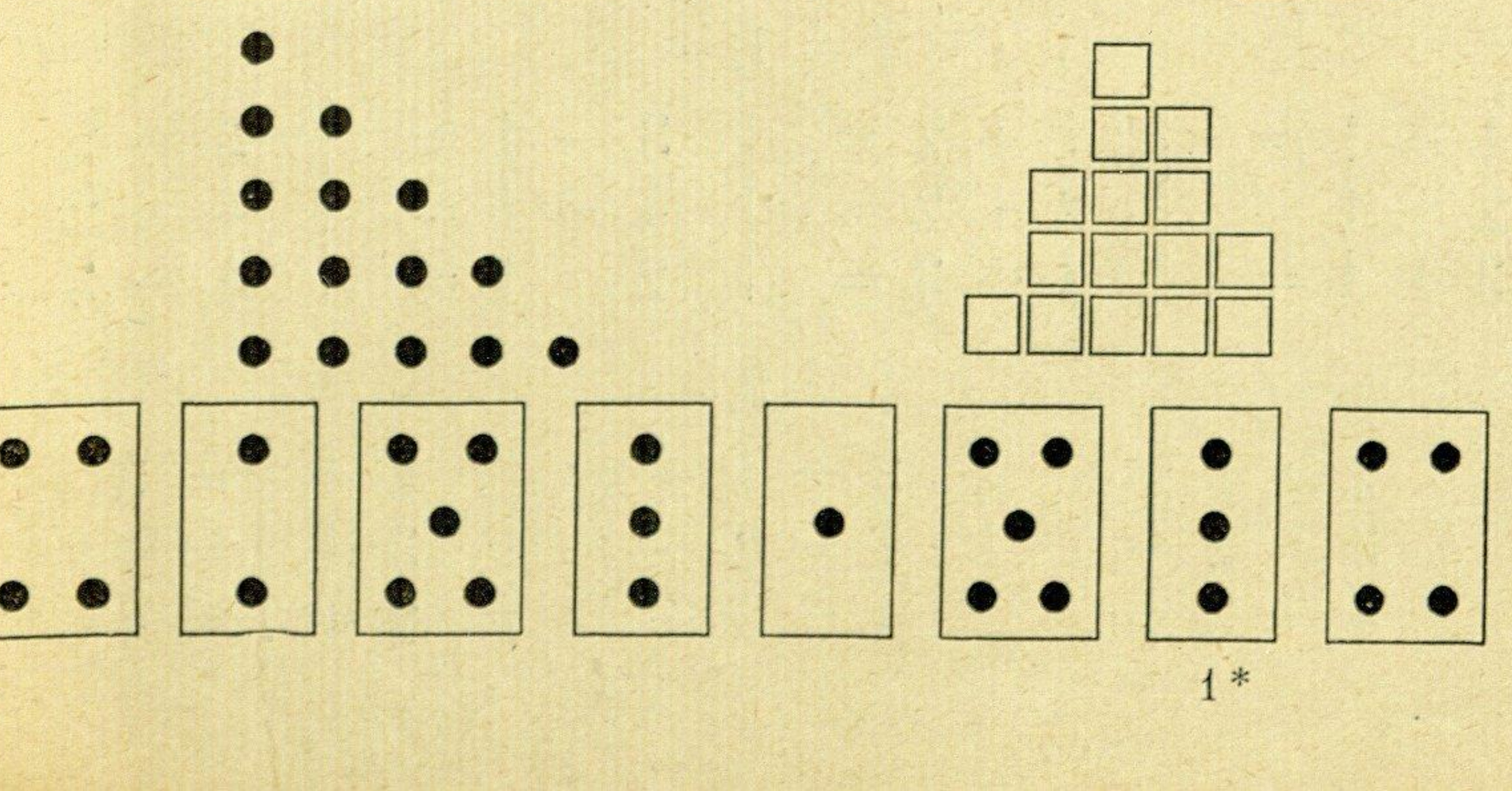
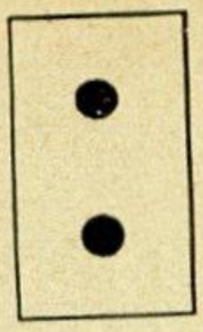






1



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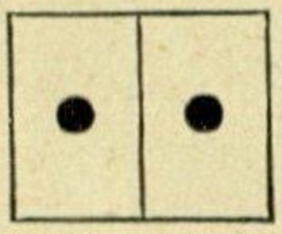
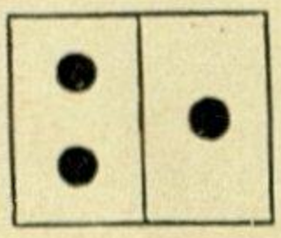


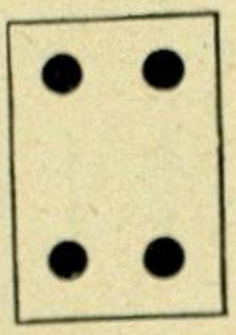
$1 + 1 =$ | $2 - 1 =$ | $2 = 1 +$.

3



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

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



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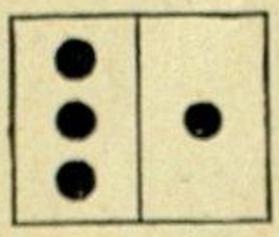
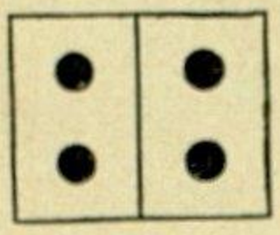


$3 + 1 =$ | $4 - 1 =$ | $4 = 3 +$.
$1 + 3 =$ | $4 - 3 =$ | $4 = 1 +$.



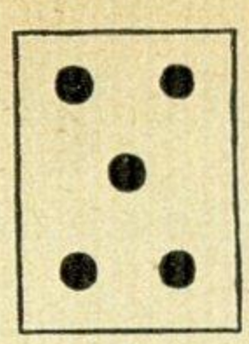
$2 + 2 =$ | $4 - 2 =$ | $4 = 2 +$.

– 1. –

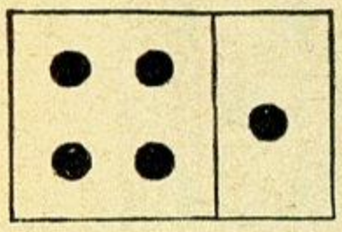
$1 + 1 =$ | $1 + 2 =$ | $3 - 1 =$ | $3 - 2 =$
$2 + 1 =$ | $2 + 2 =$ | $4 - 1 =$ | $4 - 2 =$
$3 + 1 =$ | $1 + 3 =$ | $2 - 1 =$ | $4 - 3 =$

– 2. –

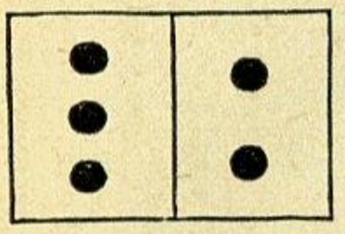
$2 = 1 +$. | $3 = 1 +$. | $2 + . = 3$
$3 = 2 +$. | $4 = 2 +$. | $3 + . = 4$
$4 = 3 +$. | $4 = 1 +$. | $2 + . = 4$



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. —

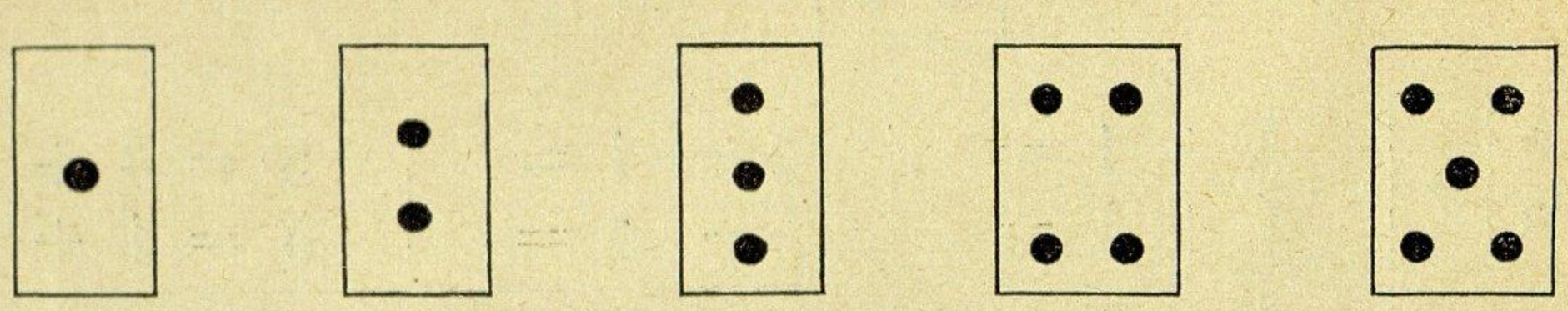
1 + 1 + 1 =	2 + 1 + 2 =	2 + 2 − 1 =
2 + 1 + 1 =	2 + 2 + 1 =	4 + 1 − 3 =
1 + 2 + 1 =	1 + 1 + 2 =	2 + 3 − 4 =
1 + 3 + 1 =	1 + 1 + 3 =	1 + 4 − 2 =

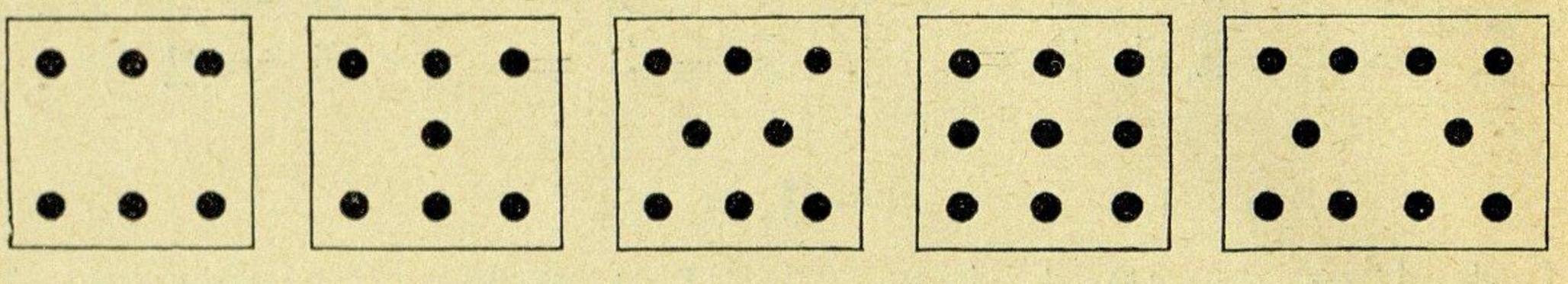
— 5. —

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.)



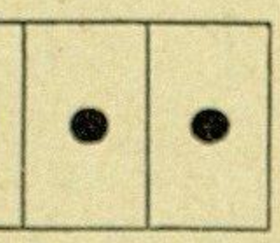


1 + 1 =
2 − 1 =
2 = 1 + .

2 × 1 =
1 in 2 =
½ von 2 =

1 + 1 + 1 =

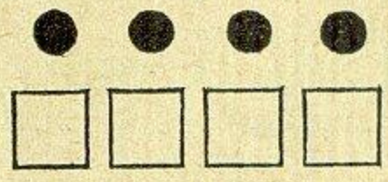
3 × 1 =
1 in 3 =
⅓ v. 3 =



2 + 1 =
1 + 2 =
3 − 1 =
3 − 2 =

3 = 2 + .
3 = 1 + .
2 in 3 = 1 (1)

2 + 1 =	3 − 1 =	3 × 1 =	1 in 3 =
1 + 1 =	3 − 2 =	2 × 1 =	1 in 2 =
1 + 2 =	2 = 1 + .	1 × 1 =	½ v. 2 =
2 − 1 =	3 = 1 + .	1 × 3 =	⅓ v. 3 =



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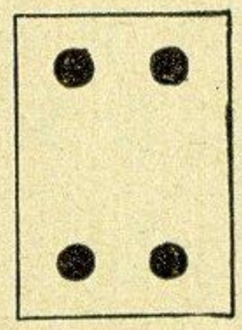
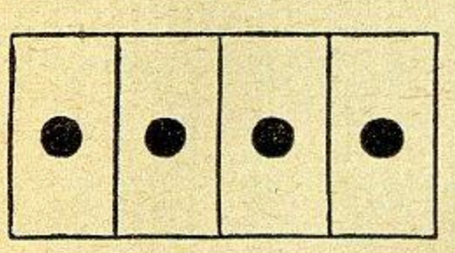
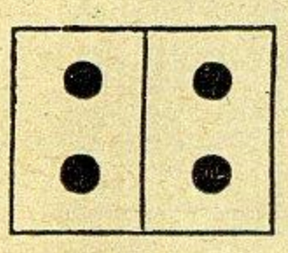
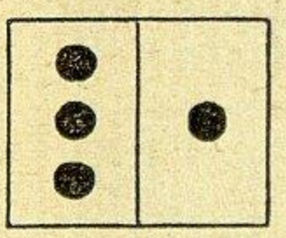




1 + 1 + 1 + 1 =	4 × 1 =
	1 in 4 =
	¼ v. 4 =



2 + 2 =	2 × 2 =
4 − 2 =	2 in 4 =
4 = 2 + .	½ v. 4 =



3 + 1 =	4 = 3 + .
1 + 3 =	4 = 1 + .
4 − 1 =	1 × 3 + 1 =
4 − 3 =	3 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 =

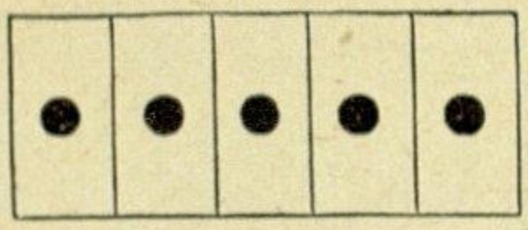
— 2. —

4 = 2 + .	1 + . = 3	2 + 1 + 1 =
4 = 1 + .	2 + . = 4	3 + 1 − 2 =
3 = 2 + .	3 + . = 4	4 − 2 − 1 =

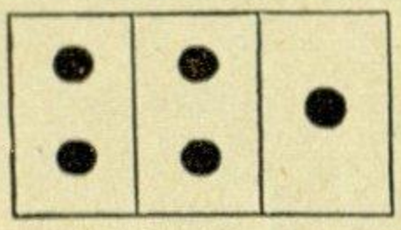
— 3. —

2 × 1 =	2 in 4 =	½ v. 2 =
4 × 1 =	1 in 3 =	½ v. 4 =
1 × 4 =	1 in 4 =	⅓ v. 3 =
2 × 2 =	2 in 3 =	¼ v. 4 =

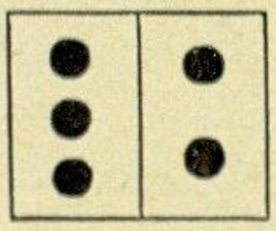
* * * * *
* * * * * 5



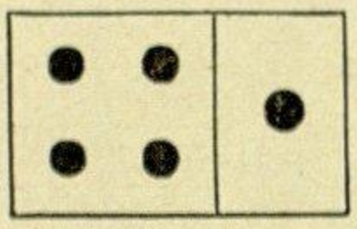
1 + 1 + 1 + 1 + 1 =
5 × 1 = | 1 in 5 = | 1/5 v. 5 =



2 + 2 + 1 =
2 × 2 + 1 = | 2 in 5 =



3 + 2 =
2 + 3 =
5 − 2 =
5 − 3 = | 5 = 3 + .
5 = 2 + .
1 × 3 + 2 =
3 in 5 =



4 + 1 =
1 + 4 =
5 − 1 =
5 − 4 = | 5 = 4 + .
5 = 1 + .
1 × 4 + 1 =
4 in 5 =

− 1. −

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

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

1 + 2 =
3 + 2 =
2 + 2 =
1 + 3 =
2 + 3 =

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

− 2. −

3 = 2 + .
4 = 3 + .
5 = 2 + .
4 = 2 + .

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

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

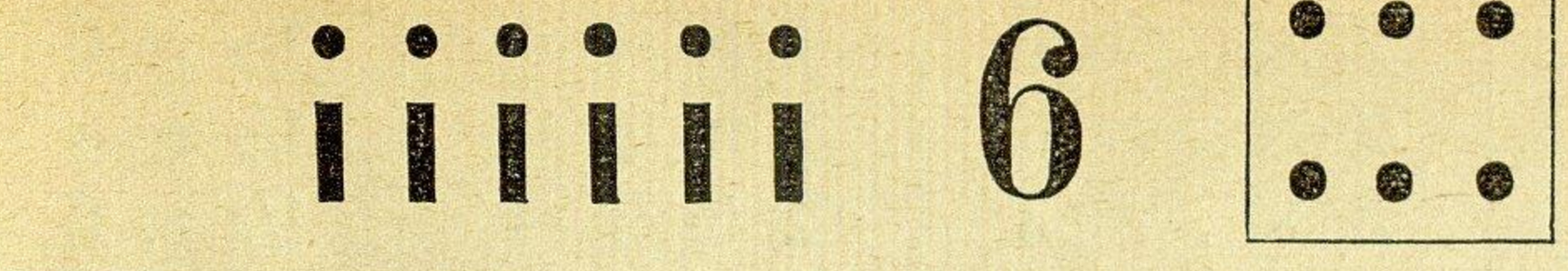
− 3. −

3 × 1 =
2 × 2 =
5 × 1 =
4 × 1 =

1 × 5 =
1 × 4 =
1 × 2 =
1 × 1 =

1 in 5 =
2 in 4 =
2 in 5 =
4 in 5 =

1/2 v. 2 =
1/4 v. 4 =
1/2 v. 4 =
1/5 v. 5 =



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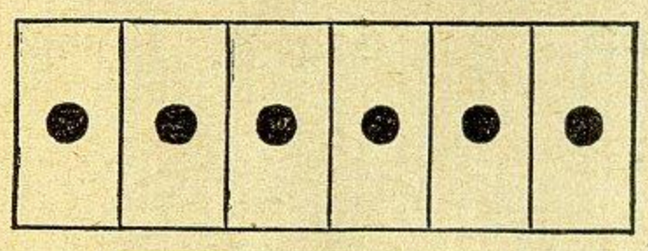
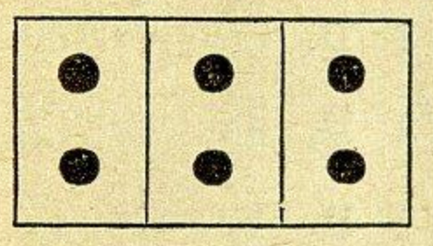
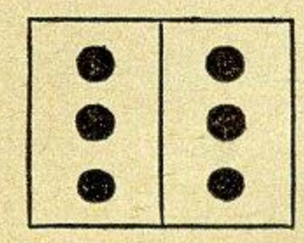


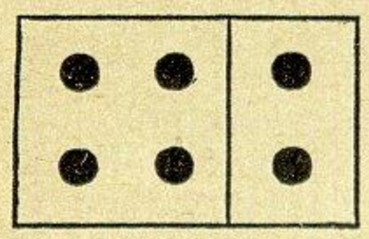
1 + 1 + 1 + 1 + 1 + 1 =
6 × 1 = | 1 in 6 = | 1/6 v. 6 =



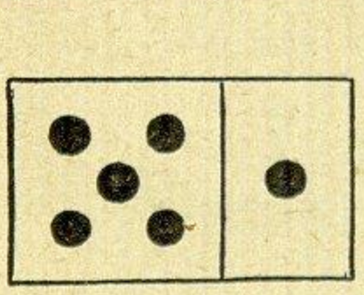
2 + 2 + 2 = | 2 in 6 =
3 × 2 = | 1/3 v. 6 =



3 + 3 = | 2 × 3 =
6 − 3 = | 3 in 6 =
6 = 3 + . | 1/2 v. 6 =



4 + 2 = | 6 = 4 + .
2 + 4 = | 6 = 2 + .
6 − 2 = | 1 × 4 + 2 =
6 − 4 = | 4 in 6 =



5 + 1 = | 6 = 5 + .
1 + 5 = | 6 = 1 + .
6 − 1 = | 1 × 5 + 1 =
6 − 5 = | 5 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. −

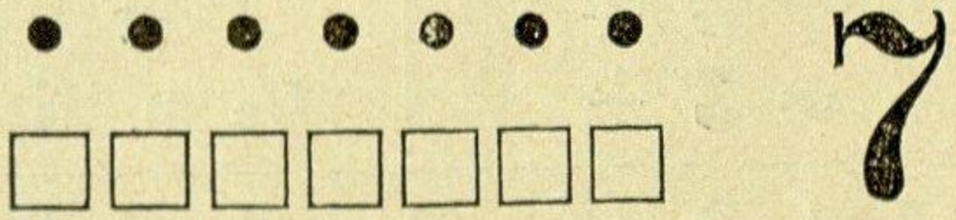
2 + 1 + 3 =	3 + 2 + 1 =	1 + 2 + 2 =
2 + 3 − 4 =	1 + 5 − 3 =	4 + 2 − 5 =
5 − 1 + 2 =	6 − 5 + 4 =	4 − 3 + 5 =
6 − 3 − 1 =	6 − 4 − 2 =	5 − 1 − 4 =

— 4. —

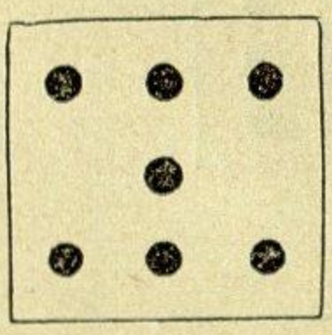
$3 \times 2 =$	$2 \times . = 4$	1 in $6 =$	$\frac{1}{2}$ v. $6 =$
$2 \times 3 =$	$2 \times . = 6$	2 in $4 =$	$\frac{1}{2}$ v. $4 =$
$2 \times 2 =$	$3 \times . = 3$	2 in $6 =$	$\frac{1}{3}$ v. $6 =$
$6 \times 1 =$	$3 \times . = 6$	3 in $6 =$	$\frac{1}{6}$ v. $6 =$

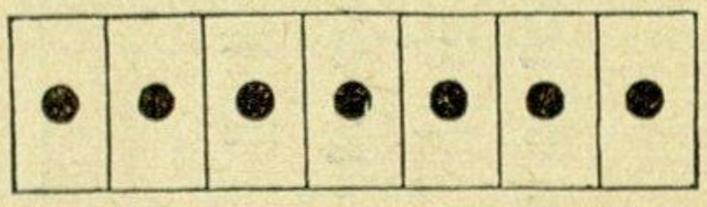
— 5. —

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



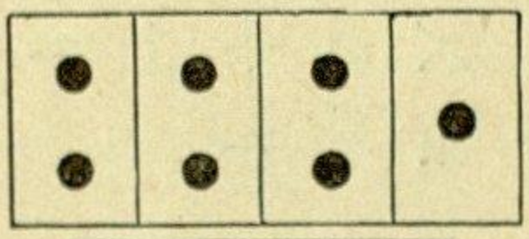
7



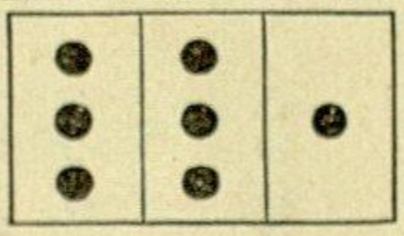


$1 + 1 + 1 + 1 + 1 + 1 + 1 =$

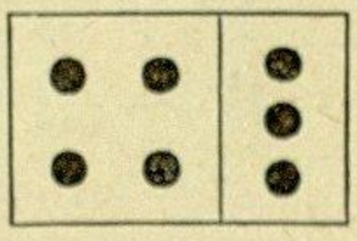
$7 \times 1 =$	1 in $7 =$	$\frac{1}{7}$ v. $7 =$



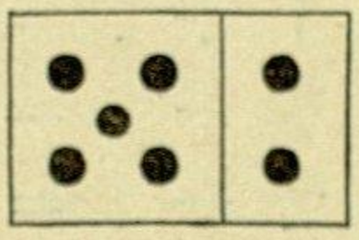
$2 + 2 + 2 + 1 =$ $3 \times 2 + 1 =$	2 in $7 =$



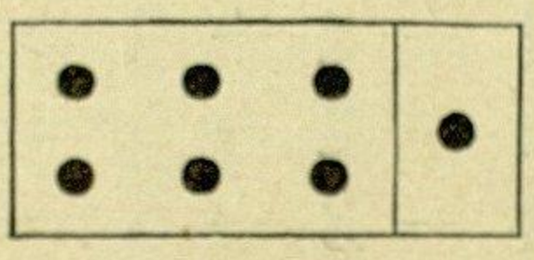
$3 + 3 + 1 =$ $2 \times 3 + 1 =$	3 in $7 =$



$4 + 3 =$	$7 = 4 + .$
$3 + 4 =$	$7 = 3 + .$
$7 - 3 =$	$1 \times 4 + 3 =$
$7 - 4 =$	4 in $7 =$



$5 + 2 =$	$7 = 5 + .$
$2 + 5 =$	$7 = 2 + .$
$7 - 2 =$	$1 \times 5 + 2 =$
$7 - 5 =$	5 in $7 =$



$6 + 1 =$	$7 = 6 + .$
$1 + 6 =$	$7 = 1 + .$
$7 - 1 =$	$1 \times 6 + 1 =$
$7 - 6 =$	6 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. —

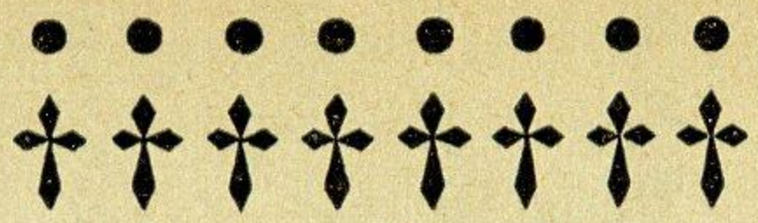
2 + 2 + 2 =	3 − 2 + 1 =	5 − 2 − 1 =
1 + 3 + 2 =	5 − 2 + 4 =	6 − 3 − 2 =
2 + 3 + 1 =	7 − 5 + 3 =	4 − 1 − 2 =
5 + 2 − 4 =	7 − 3 + 1 =	6 − 2 − 3 =
5 + 1 − 2 =	4 − 3 + 6 =	7 − 5 − 1 =
2 + 4 − 2 =	7 − 4 + 2 =	7 − 3 − 4 =

— 5. —

1 × 2 =	6 = 3 × .	2 in 4 =	½ v. 4 =
2 × 2 =	4 = 2 × .	2 in 6 =	½ v. 6 =
3 × 2 =	2 = 1 × .	3 in 6 =	⅓ v. 3 =
2 × 3 =	6 = 2 × .	4 in 7 =	⅓ v. 6 =
7 × 1 =	7 = 1 × .	5 in 7 =	¼ v. 4 =

— 6. —

1 × 5 + 2 =	1 × 6 − 4 =	½ v. 4 + 4 =
2 × 3 − 3 =	4 × 1 + 3 =	½ v. 6 − 3 =
3 × 2 + 1 =	1 × 1 + 5 =	⅓ v. 6 + 5 =
7 × 1 − 4 =	7 × 1 − 7 =	¼ v. 4 + 4 =



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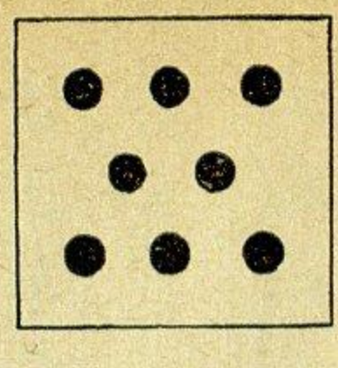
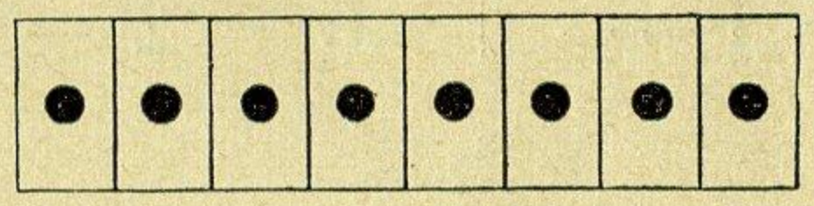
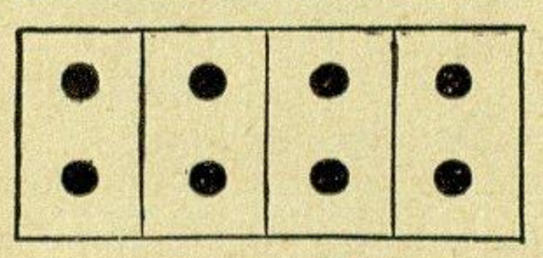


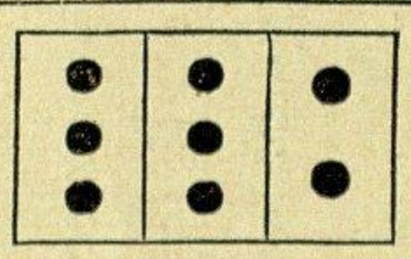


$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 8$

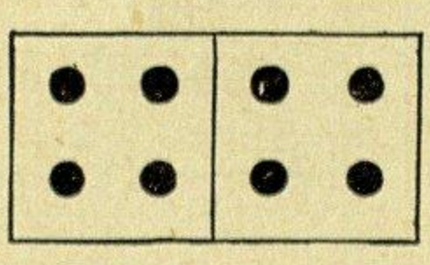
$8 \times 1 =$	1 in $8 =$	$1/8$ v. $8 =$



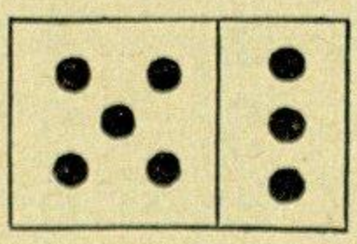
$2 + 2 + 2 + 2 =$ $4 \times 2 =$	2 in $8 =$ $1/4$ v. $8 =$



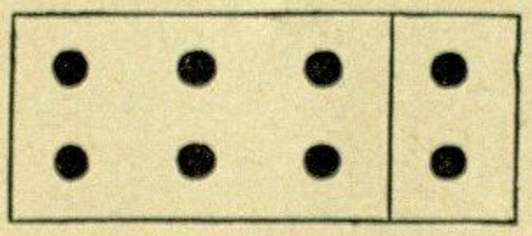
$3 + 3 + 2 =$ $2 \times 3 + 2 =$	3 in $8 =$



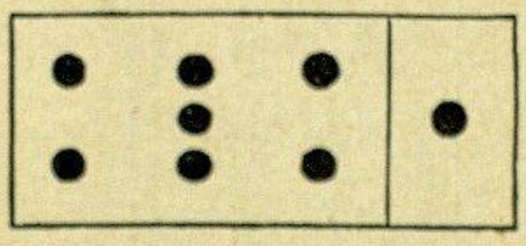
$4 + 4 =$ $8 - 4 =$ $8 = 4 +$.	$2 \times 4 =$ 4 in $8 =$ $1/2$ v. $8 =$



$5 + 3 =$ $3 + 5 =$ $8 - 3 =$ $8 - 5 =$	$8 = 5 +$. $8 = 3 +$. $1 \times 5 + 3 =$ 5 in $8 =$



$6 + 2 =$ $2 + 6 =$ $8 - 2 =$ $8 - 6 =$	$8 = 6 +$. $8 = 2 +$. $1 \times 6 + 2 =$ 6 in $8 =$



$7 + 1 =$ $1 + 7 =$ $8 - 1 =$ $8 - 7 =$	$8 = 7 +$. $8 = 1 +$. $1 \times 7 + 1 =$ 7 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. —

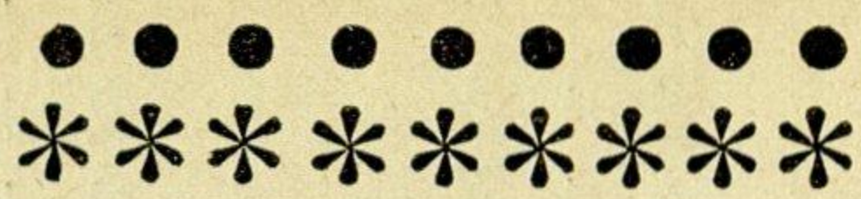
3 × 2 =	4 × 2 =	2 × . = 6	. × 1 = 6
2 × 4 =	1 × 6 =	1 × . = 7	. × 2 = 4
7 × 1 =	2 × 3 =	4 × . = 8	. × 4 = 8

— 7. —

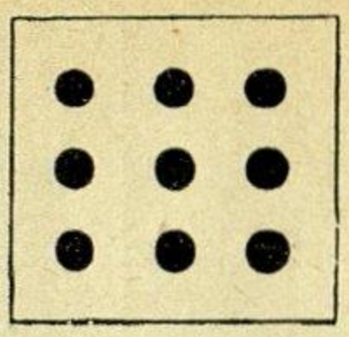
2 in 8 =	3 in 6 =	½ v. 4 =	⅓ v. 6 =
2 in 6 =	4 in 8 =	½ v. 8 =	¼ v. 8 =
2 in 5 =	5 in 7 =	½ v. 6 =	⅛ v. 8 =

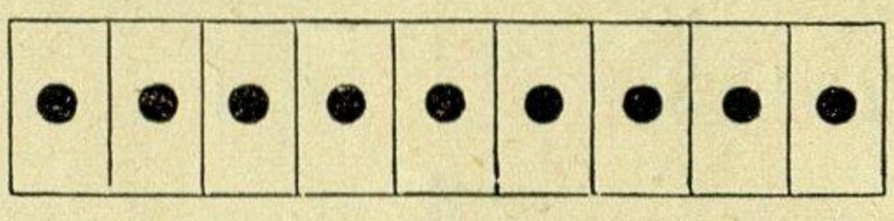
— 8. —

2 × 2 + 4. =	2 × 4 − 5 =	½ v. 4 + 5 =
3 × 2 + 1 =	2 × 3 − 2 =	⅓ v. 6 + 6 =
4 × 1 + 3 =	7 × 1 − 4 =	½ v. 8 − 3 =



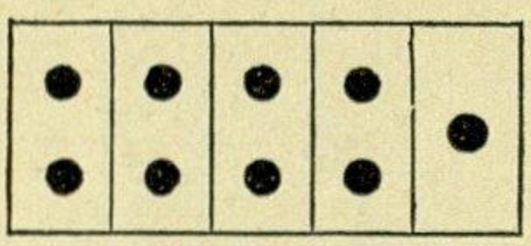
9



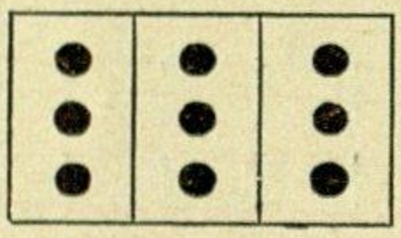


$1+1+1+1+1+1+1+1+1=$

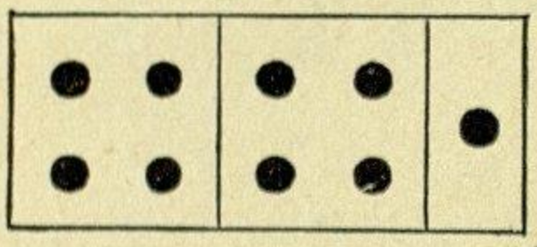
$9\times 1=$ | 1 in $9=$ | $1/9$ v. $9=$



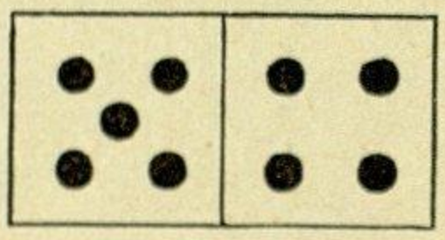
$2+2+2+2+1=$
$4\times 2+1=$ | 2 in $9=$



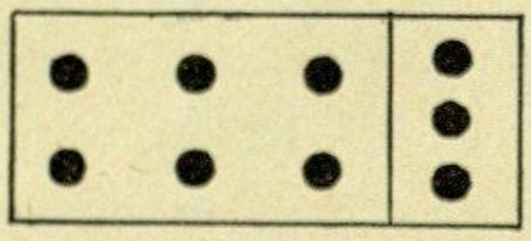
$3+3+3=$
$3\times 3=$ | 3 in $9=$
$1/3$ v. $9=$



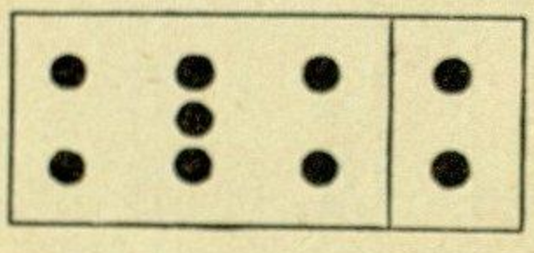
$4+4+1=$
$2\times 4+1=$ | 4 in $9=$



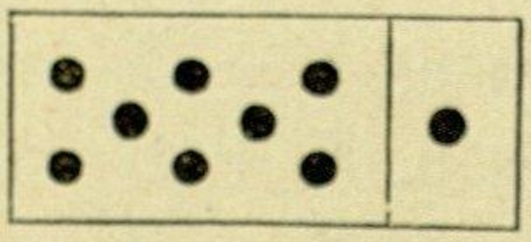
$5+4=$
$4+5=$
$9-4=$
$9-5=$ | $9=5+\ .$
$9=4+\ .$
$1\times 5+4=$
5 in $9=$



$6+3=$
$3+6=$
$9-3=$
$9-6=$ | $9=6+\ .$
$9=3+\ .$
$1\times 6+3=$
6 in $9=$



$7+2=$
$2+7=$
$9-2=$
$9-7=$ | $9=7+\ .$
$9=2+\ .$
$1\times 7+2=$
7 in $9=$



$8+1=$
$1+8=$
$9-1=$
$9-8=$ | $9=8+\ .$
$9=1+\ .$
$1\times 8+1=$
8 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. —

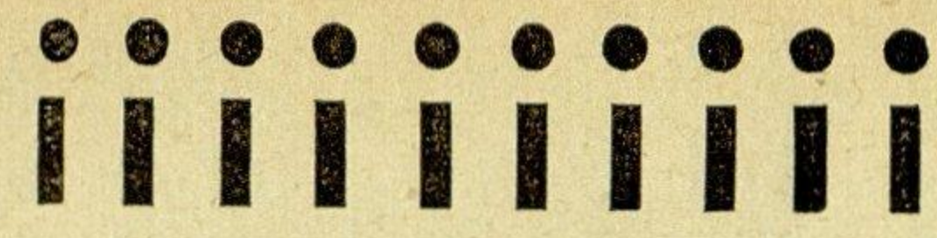
2 × 1 =	4 × 2 =	1 × 6 =	4 × 1 =
1 × 5 =	6 × 1 =	2 × 2 =	1 × 9 =
2 × 4 =	1 × 8 =	1 × 7 =	3 × 2 =
3 × 3 =	3 × 1 =	2 × 3 =	5 × 1 =

— 6. —

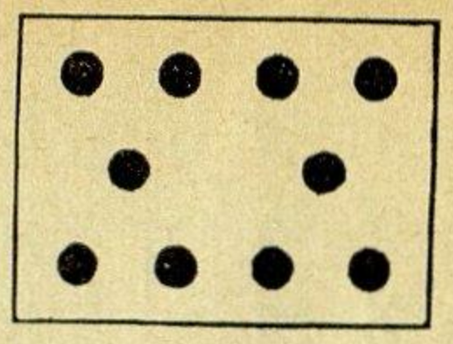
2 in 6 =	3 in 9 =	¼ v. 4 =	½ v. 4 =
2 in 4 =	4 in 8 =	½ v. 8 =	¼ v. 8 =
3 in 6 =	3 in 7 =	⅕ v. 5 =	⅓ v. 9 =
2 in 8 =	5 in 9 =	⅓ v. 6 =	½ v. 6 =

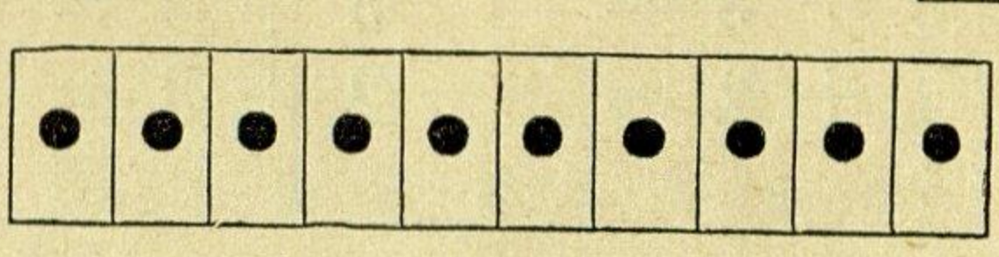
— 7. —

8 = 2 × .	. × 2 = 4	2 × 3 + 1 =
6 = 3 × .	. × 4 = 8	3 × 3 − 7 =
9 = 3 × .	. × 2 = 6	½ v. 8 + 5 =
6 = 2 × .	. × 1 = 9	⅓ v. 9 − 2 =



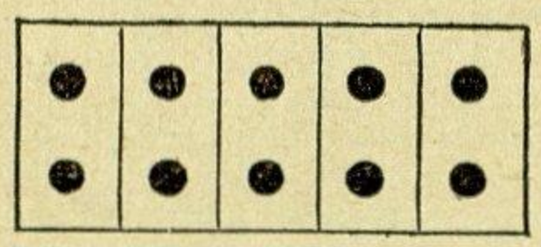
10



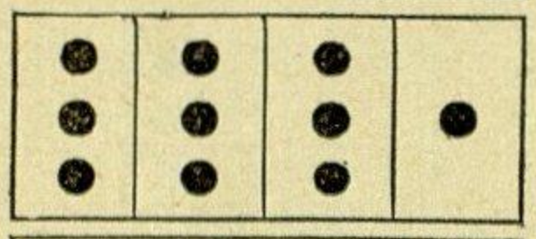


$1+1+1+1+1+1+1+1+1+1=$

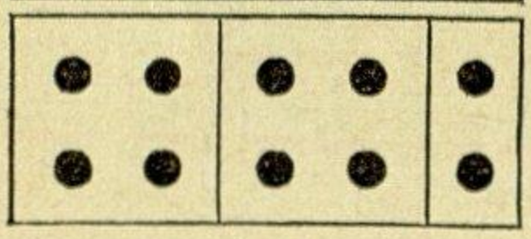
$10 \times 1 =$ | 1 in 10 = | 1/10 v. 10 =



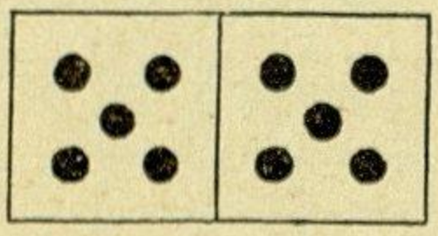
$2+2+2+2+2=$ | 2 in 10 =
$5 \times 2=$ | 1/5 v. 10 =



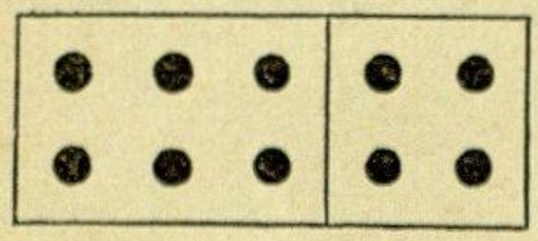
$3+3+3+1=$ | 3 in 10 =
$3 \times 3+1=$



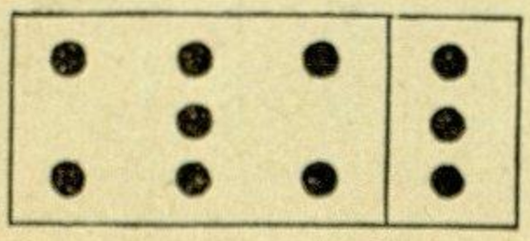
$4+4+2=$ | 4 in 10 =
$2 \times 4+2=$



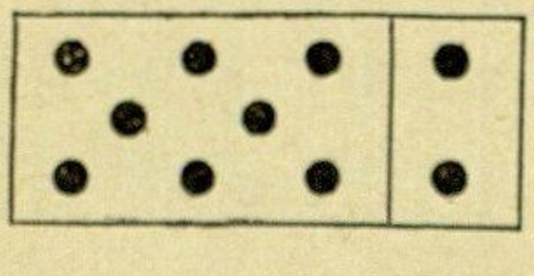
$5+5=$ | $2 \times 5=$
$10-5=$ | 5 in 10 =
$10=5+.$ | 1/2 v. 10 =



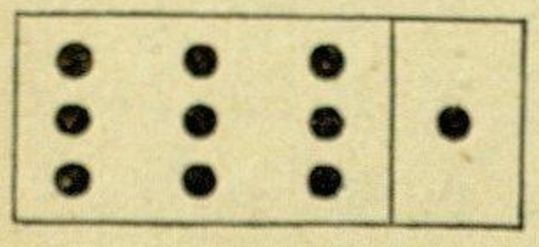
$6+4=$ | $10=6+.$
$4+6=$ | $10=4+.$
$10-4=$ | $1 \times 6+4=$
$10-6=$ | 6 in 10 =



$7+3=$ | $10=7+.$
$3+7=$ | $10=3+.$
$10-3=$ | $1 \times 7+3=$
$10-7=$ | 7 in 10 =



$8+2=$ | $10=8+.$
$2+8=$ | $10=2+.$
$10-2=$ | $1 \times 8+2=$
$10-8=$ | 8 in 10 =



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

— 7. —

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

— 8. —

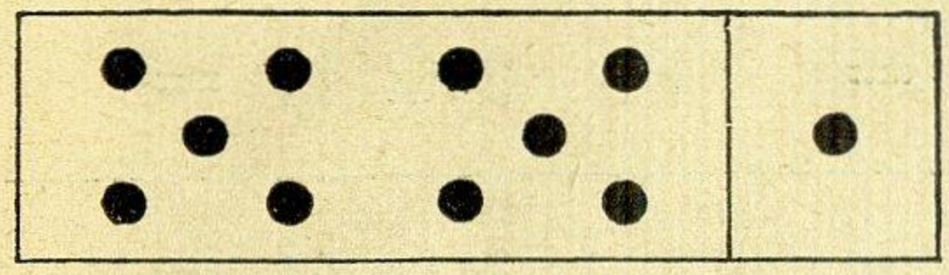
1/2 v. 10 =	1/2 v. 6 =	1/4 v. 8 =	1/6 v. 6 =
1/2 v. 4 =	1/3 v. 9 =	1/4 v. 4 =	1/8 v. 8 =
1/2 v. 8 =	1/3 v. 3 =	1/5 v. 5 =	1/9 v. 9 =
1/2 v. 2 =	1/3 v. 6 =	1/5 v. 10 =	1/10 v. 10 =

— 9. —

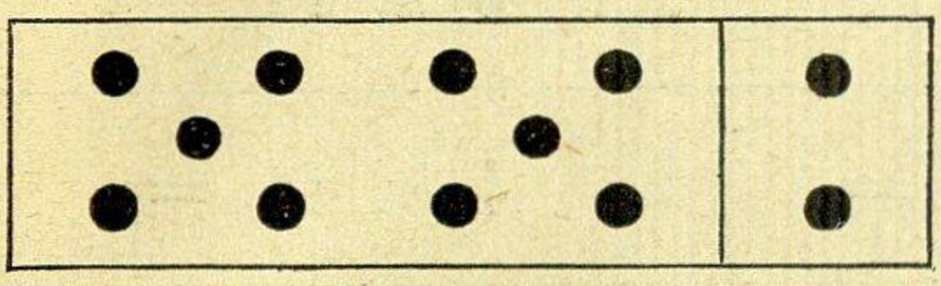
2 × 3 + 4 =	3 × 2 + 4 =	1/4 v. 8 + 7 =
3 × 1 + 5 =	3 × 2 − 4 =	1/5 v. 10 + 6 =
2 × 2 + 6 =	2 × 2 + 2 =	1/2 v. 6 − 3 =
5 × 2 − 7 =	2 × 2 − 2 =	1/2 v. 10 − 4 =
2 × 4 − 5 =	3 × 3 + 1 =	1/3 v. 9 − 2 =
2 × 5 − 6 =	3 × 3 − 1 =	1/2 v. 8 − 3 =

Zweiter Abschnitt.

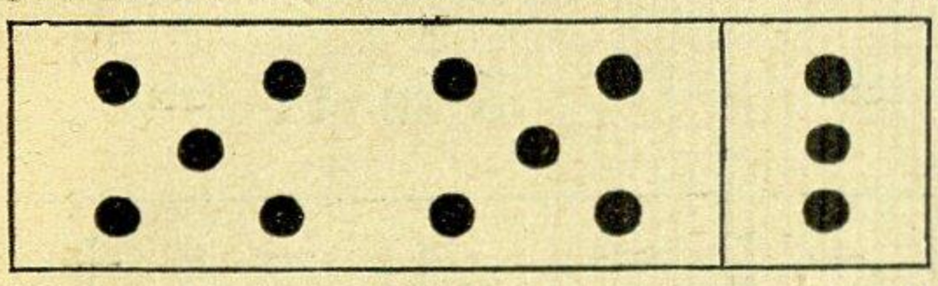
Erweiterung des Zahlenraumes bis zwanzig.



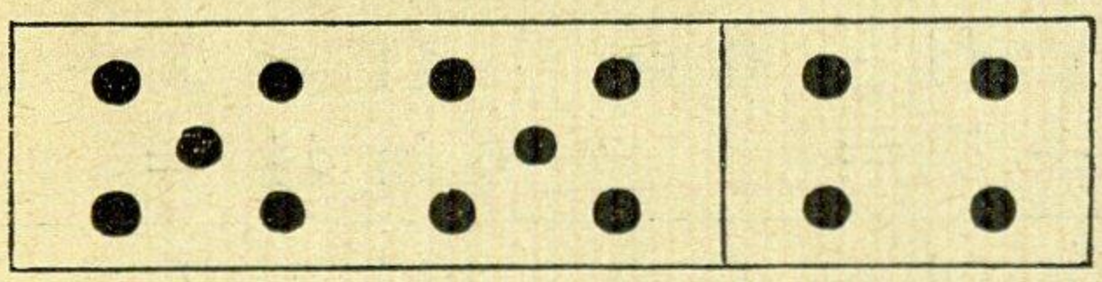
10 + 1 = 11



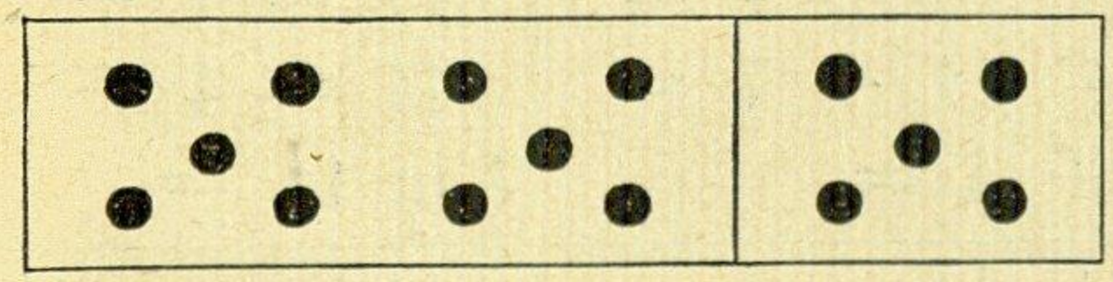
10 + 2 = 12



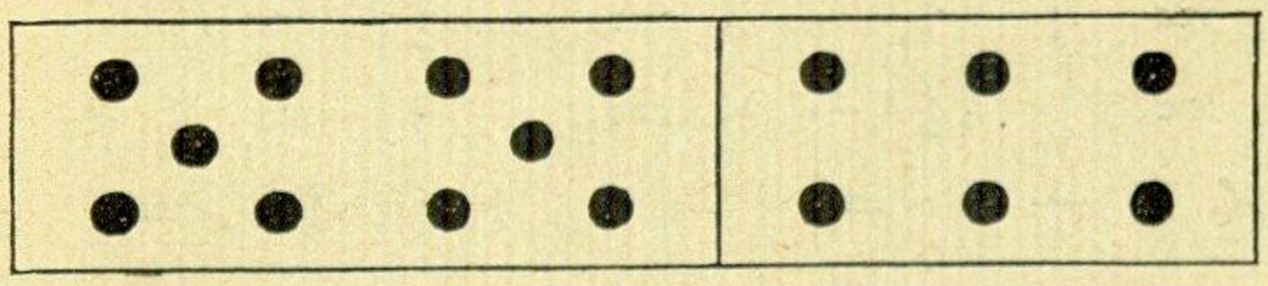
10 + 3 = 13



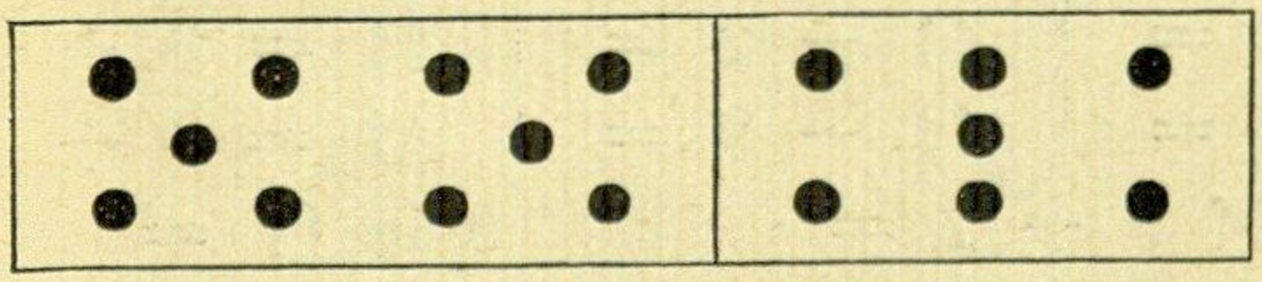
10 + 4 = 14



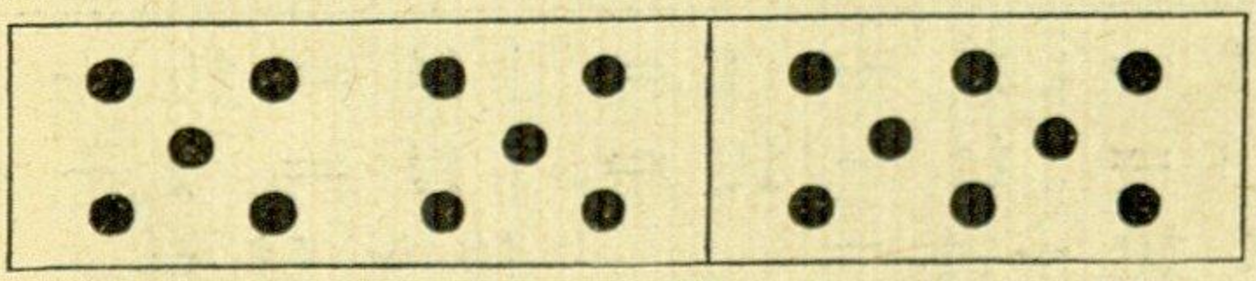
10 + 5 = 15



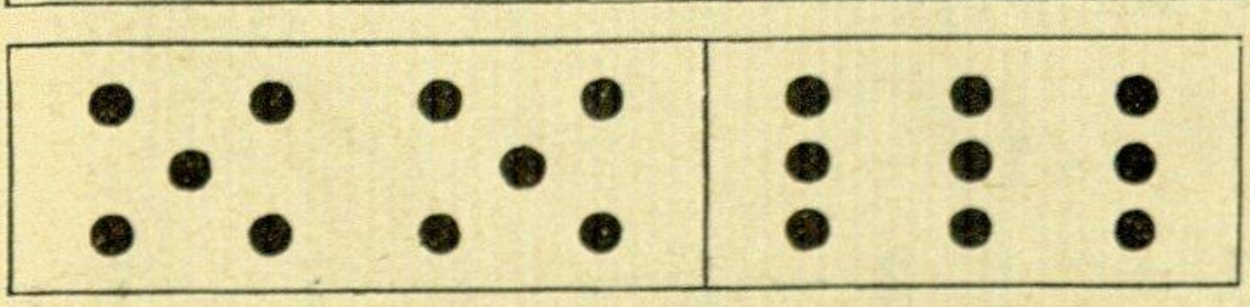
10 + 6 = 16



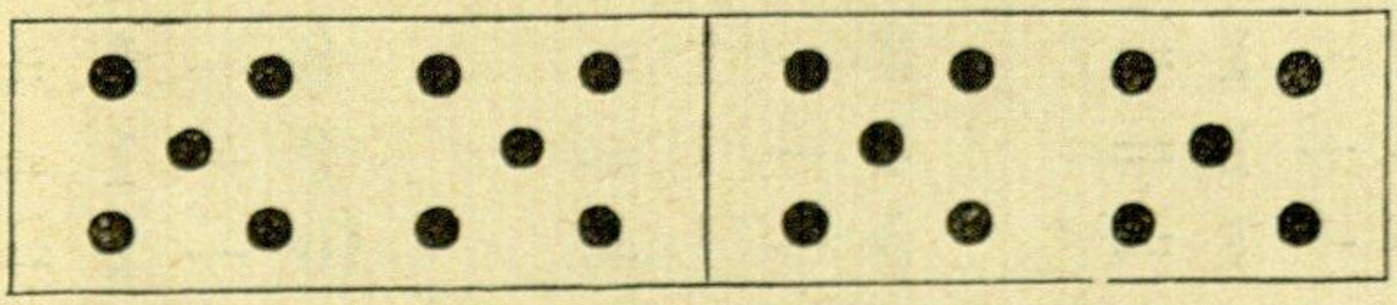
10 + 7 = 17



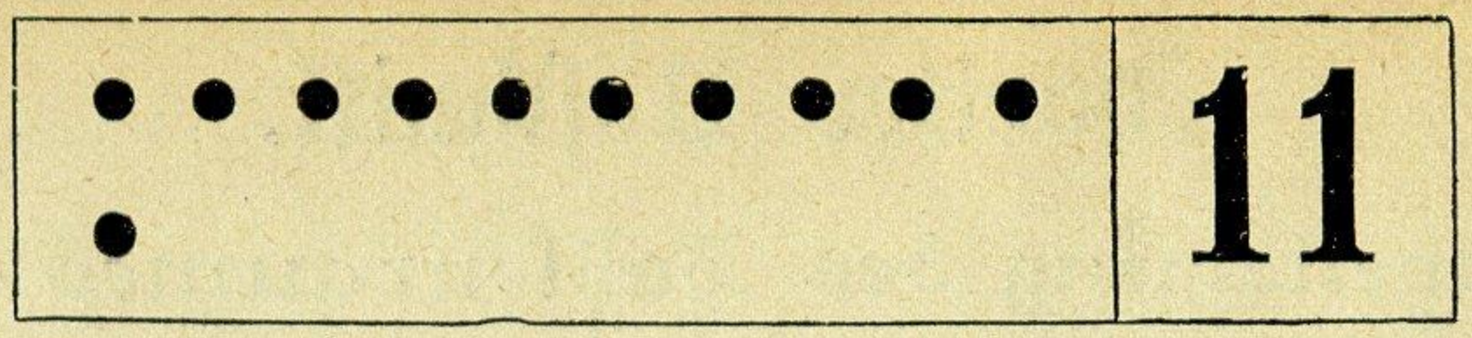
10 + 8 = 18



10 + 9 = 19

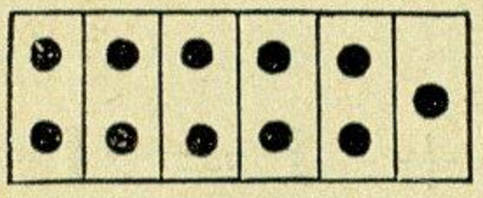


10 + 10 = 20

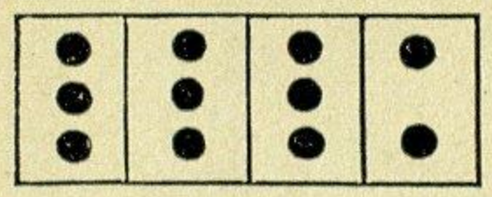


11

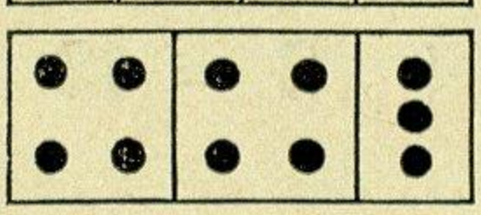
$11 \times 1 =$ | 1 in $11 =$



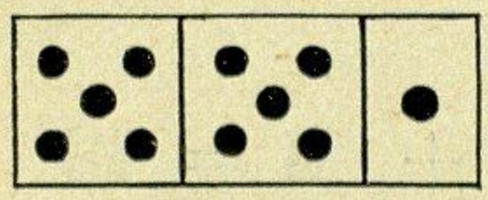
$5 \times 2 + 1 =$ | 2 in $11 =$



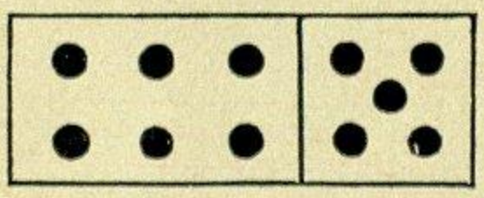
$3 \times 3 + 2 =$ | 3 in $11 =$



$2 \times 4 + 3 =$ | 4 in $11 =$

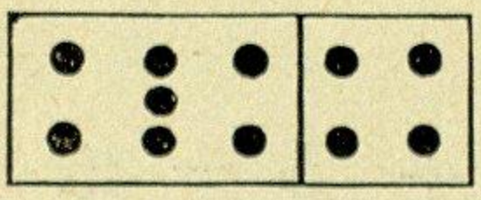


$2 \times 5 + 1 =$ | 5 in $11 =$



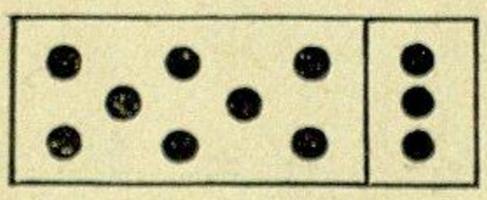
$6 + 5 =$ | $11 - 5 =$ | $11 = 6 +$.
$5 + 6 =$ | $11 - 6 =$ | $11 = 5 +$.

$1 \times 6 + 5 =$ | 6 in $11 =$



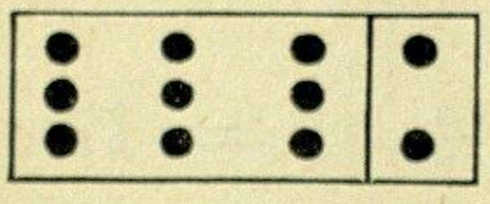
$7 + 4 =$ | $11 - 4 =$ | $11 = 7 +$.
$4 + 7 =$ | $11 - 7 =$ | $11 = 4 +$.

$1 \times 7 + 4 =$ | 7 in $11 =$



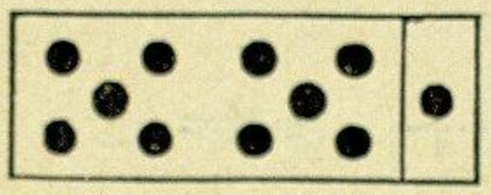
$8 + 3 =$ | $11 - 3 =$ | $11 = 8 +$.
$3 + 8 =$ | $11 - 8 =$ | $11 = 3 +$.

$1 \times 8 + 3 =$ | 8 in $11 =$



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

$1 \times 9 + 2 =$ | 9 in $11 =$



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

$1 \times 10 + 1 =$ | 10 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. —

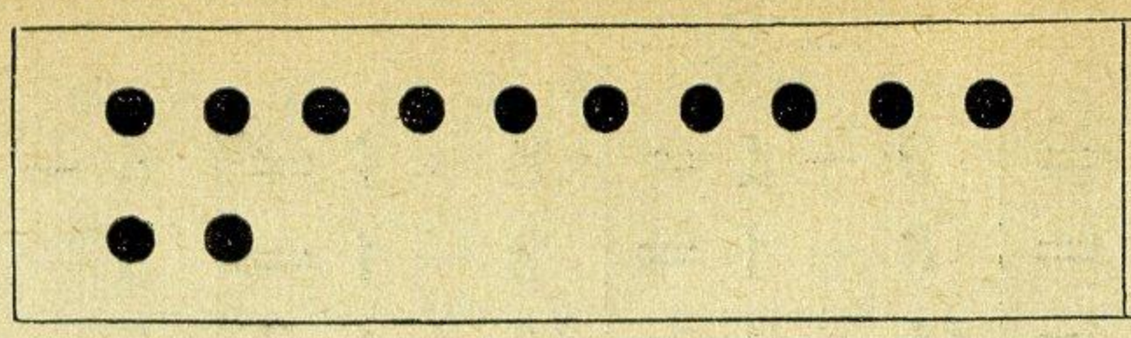
5 × 2 =	4 × 1 =	6 = . × 3	2 × 4 + 3 =
2 × 4 =	3 × 2 =	8 = . × 2	3 × 2 + 5 =
3 × 3 =	1 × 9 =	10 = . × 5	1 × 5 + 4 =
4 × 2 =	2 × 2 =	9 = 3 × .	5 × 2 − 7 =
2 × 3 =	2 × 5 =	4 = 4 × .	3 × 3 − 6 =

— 6. —

2 in 10 =	4 in 4 =	2 in 5 =	4 in 6 =	7 in 10 =
2 in 6 =	4 in 8 =	2 in 9 =	4 in 11 =	8 in 9 =
2 in 8 =	5 in 10 =	2 in 11 =	5 in 7 =	8 in 11 =
3 in 9 =	6 in 6 =	3 in 8 =	5 in 11 =	9 in 10 =
3 in 6 =	9 in 9 =	3 in 11 =	6 in 11 =	9 in 11 =

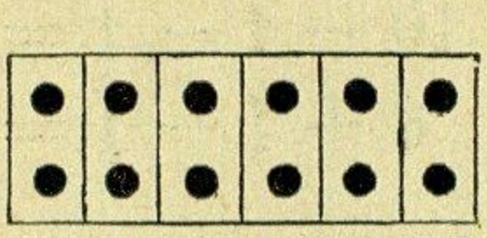
— 7. —

1/2 v. 6 =	1/2 v. 2 =	1/4 v. 8 =	1/6 v. 6 =
1/2 v. 10 =	1/3 v. 9 =	1/4 v. 4 =	1/8 v. 8 =
1/2 v. 4 =	1/3 v. 3 =	1/5 v. 5 =	1/9 v. 9 =
1/2 v. 8 =	1/3 v. 6 =	1/5 v. 10 =	1/10 v. 10 =

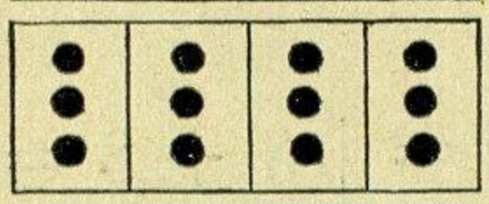


12

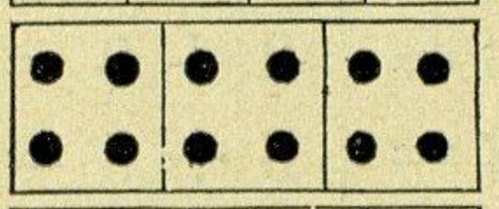
$12 \times 1 =$ | 1 in $12 =$



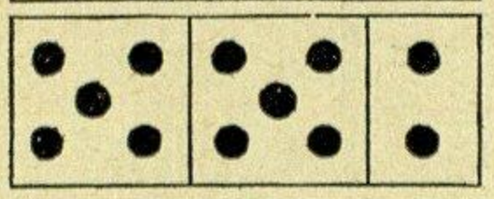
$6 \times 2 =$ | 2 in $12 =$ | $1/6$ v. $12 =$



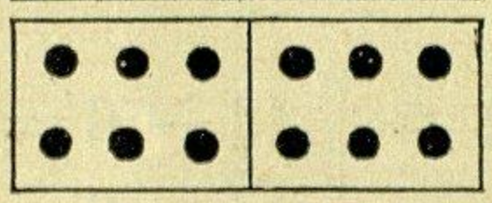
$4 \times 3 =$ | 3 in $12 =$ | $1/4$ v. $12 =$



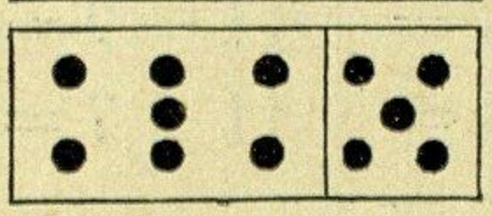
$3 \times 4 =$ | 4 in $12 =$ | $1/3$ v. $12 =$



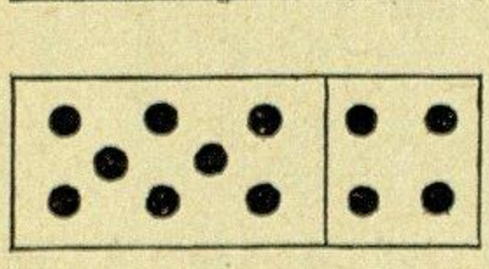
$2 \times 5 + 2 =$ | 5 in $12 =$



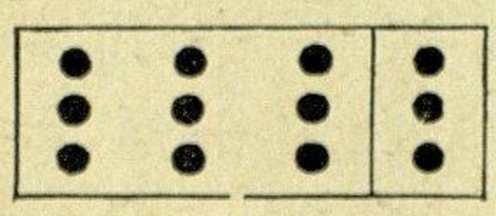
$6 + 6 =$ | $12 - 6 =$ | $12 = 6 +$.
$2 \times 6 =$ | 6 in $12 =$ | $1/2$ v. $12 =$



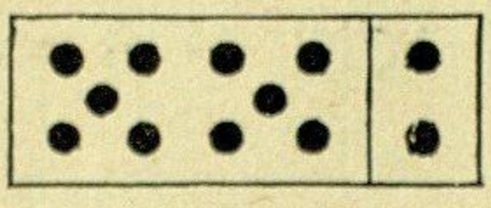
$7 + 5 =$ | $12 - 5 =$ | $12 = 7 +$.
$5 + 7 =$ | $12 - 7 =$ | $12 = 5 +$.
$1 \times 7 + 5 =$ | 7 in $12 =$



$8 + 4 =$ | $12 - 4 =$ | $12 = 8 +$.
$4 + 8 =$ | $12 - 8 =$ | $12 = 4 +$.
$1 \times 8 + 4 =$ | 8 in $12 =$



$9 + 3 =$ | $12 - 3 =$ | $12 = 9 +$.
$3 + 9 =$ | $12 - 9 =$ | $12 = 3 +$.
$1 \times 9 + 3 =$ | 9 in $12 =$



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

— 6. —

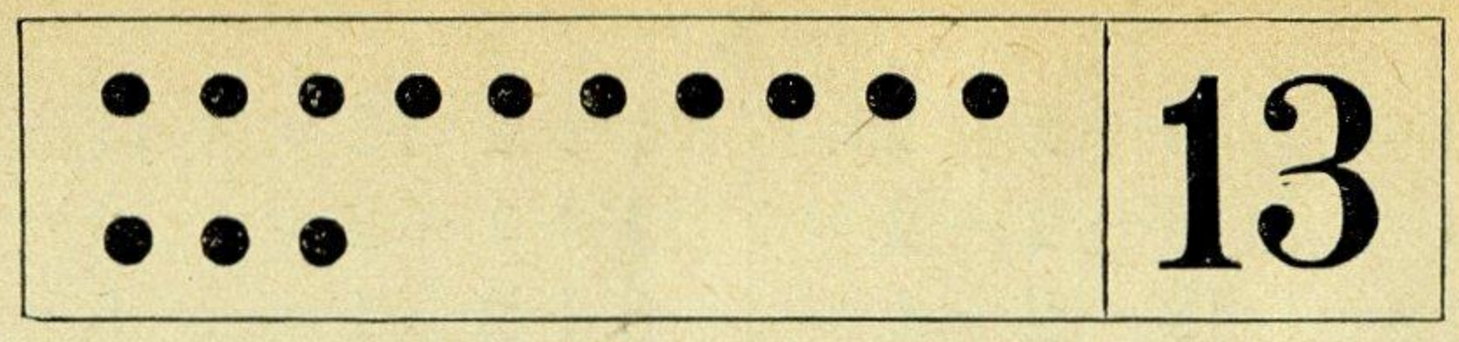
2 in 4 =	2 in 8 =	2 in 9 =	2 in 10 =	2 in 12 =
3 in 4 =	3 in 8 =	3 in 9 =	3 in 10 =	3 in 12 =
2 in 6 =	4 in 8 =	5 in 9 =	4 in 10 =	4 in 12 =
3 in 6 =	5 in 8 =	6 in 9 =	5 in 10 =	5 in 12 =
5 in 6 =	7 in 8 =	8 in 9 =	7 in 10 =	6 in 12 =

— 7. —

1/2 v. 6 =	1/2 v. 8 =	1/9 v. 9 =	1/2 v. 12 =
1/3 v. 6 =	1/4 v. 8 =	1/2 v. 10 =	1/3 v. 12 =
1/6 v. 6 =	1/8 v. 8 =	1/5 v. 10 =	1/4 v. 12 =
1/7 v. 7 =	1/3 v. 9 =	1/10 v. 10 =	1/6 v. 12 =

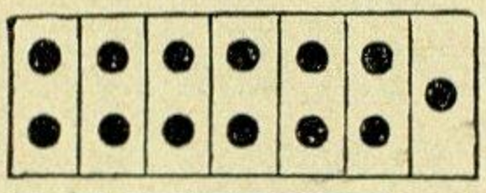
— 8. —

2 × 5 + 2 =	5 × 2 + 1 =	1/4 v. 8 + 9 =
6 × 2 − 3 =	4 × 3 − 5 =	1/2 v. 10 − 4 =
3 × 3 + 3 =	3 × 2 + 6 =	1/6 v. 12 + 5 =
3 × 4 − 4 =	2 × 6 − 7 =	1/4 v. 12 − 3 =

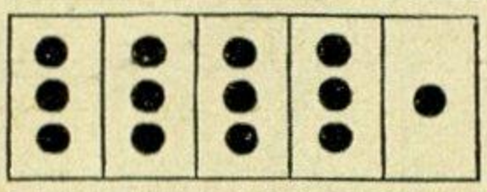


13

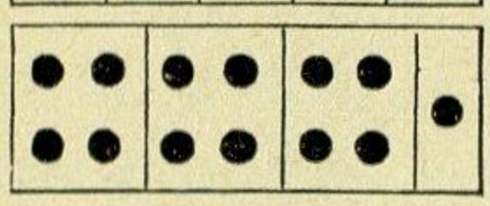
13 × 1 = | 1 in 13 =



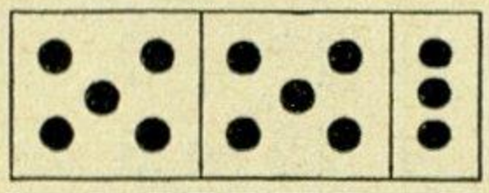
6 × 2 + 1 = | 2 in 13 =



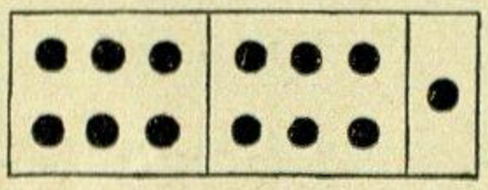
4 × 3 + 1 = | 3 in 13 =



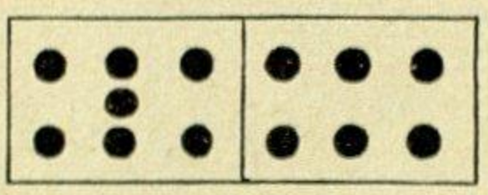
3 × 4 + 1 = | 4 in 13 =



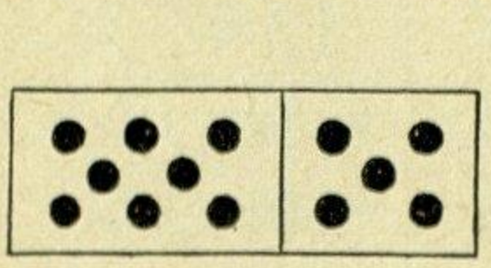
2 × 5 + 3 = | 5 in 13 =



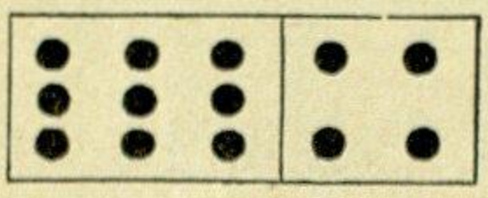
2 × 6 + 1 = | 6 in 13 =



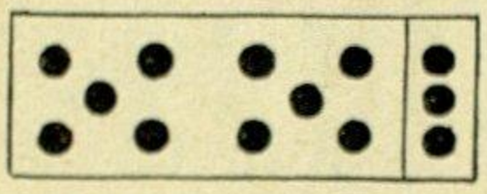
7 + 6 = | 13 − 6 = | 13 = 7 + .
6 + 7 = | 13 − 7 = | 13 = 6 + .
1 × 7 + 6 = | 7 in 13 =



8 + 5 = | 13 − 5 = | 13 = 8 + .
5 + 8 = | 13 − 8 = | 13 = 5 + .
1 × 8 + 5 = | 8 in 13 =



9 + 4 = | 13 − 4 = | 13 = 9 + .
4 + 9 = | 13 − 9 = | 13 = 4 + .
1 × 9 + 4 = | 9 in 13 =



10 + 3 = | 13 − 3 = | 13 = 10 + .
3 + 10 = | 13 − 10 = | 13 = 3 + .
1 × 10 + 3 = | 10 in 13 =

— 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 × 2 =	5 × 2 =	3 × 4 =	2 × 5 =	10 = . × 5
6 × 2 =	3 × 1 =	2 × 4 =	2 × 6 =	6 = . × 2
4 × 2 =	3 × 3 =	4 × 1 =	7 × 1 =	12 = 3 × .
2 × 2 =	3 × 2 =	4 × 3 =	1 × 9 =	8 = 4 × .

— 6. —

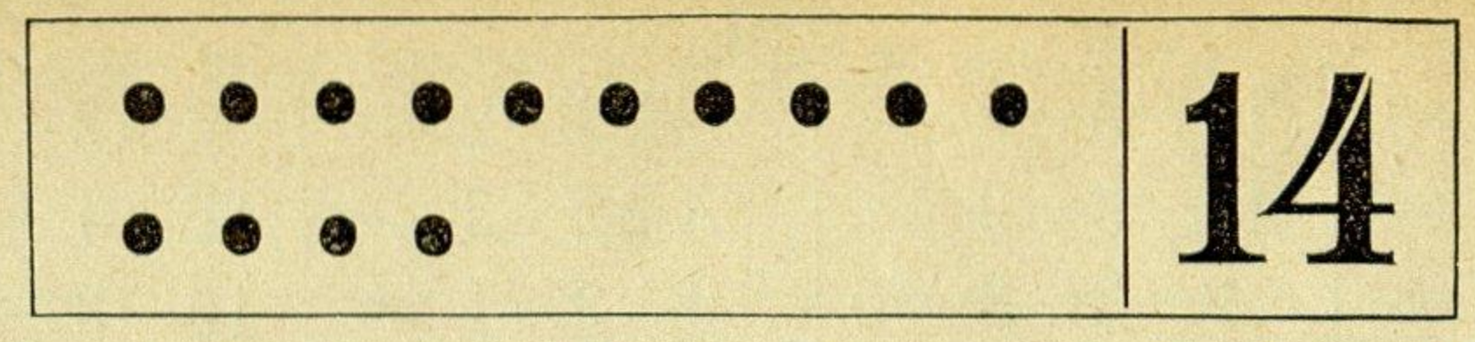
2 in 10 =	3 in 6 =	4 in 8 =	6 in 6 =
2 in 4 =	3 in 12 =	4 in 12 =	6 in 12 =
2 in 6 =	3 in 3 =	5 in 5 =	7 in 11 =
2 in 8 =	3 in 9 =	5 in 10 =	9 in 12 =

— 7. —

1/2 v. 10 =	1/2 v. 6 =	1/3 v. 12 =	1/5 v. 10 =
1/2 v. 8 =	1/2 v. 2 =	1/4 v. 4 =	1/5 v. 5 =
1/2 v. 4 =	1/3 v. 9 =	1/4 v. 8 =	1/6 v. 6 =
1/2 v. 12 =	1/3 v. 3 =	1/4 v. 12 =	1/6 v. 12 =

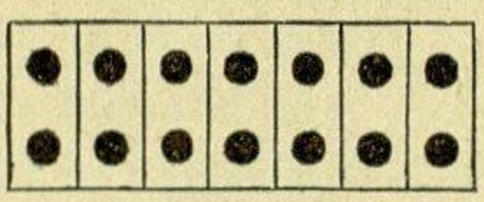
— 8. —

2 × 3 + 7 =	2 × 6 − 5 =	1/3 v. 12 + 9 =
4 × 2 + 4 =	4 × 3 − 6 =	1/2 v. 12 − 5 =
3 × 3 + 3 =	5 × 2 − 8 =	1/2 v. 10 + 7 =
2 × 2 + 9 =	2 × 4 − 3 =	1/3 v. 12 − 3 =

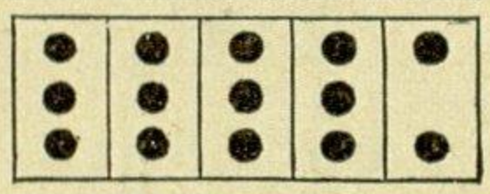


14

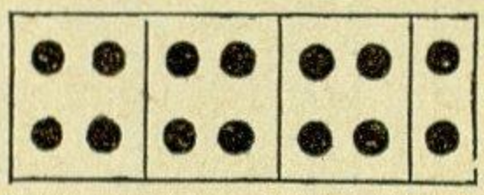
14 × 1 = | 1 in 14 =



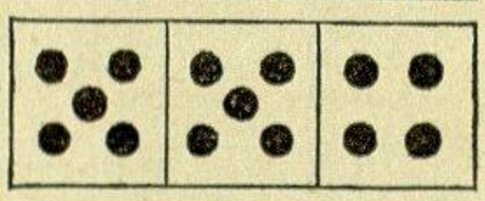
7 × 2 = | 2 in 14 = | 1/7 v. 14 =



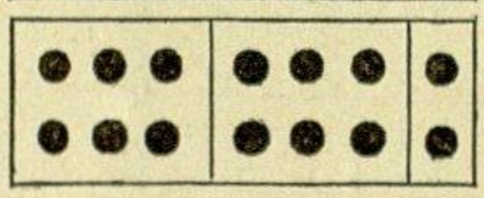
4 × 3 + 2 = | 3 in 14 =



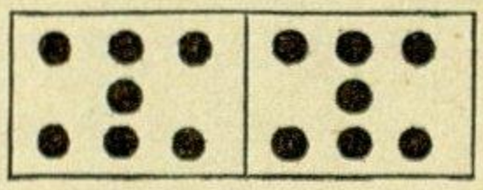
3 × 4 + 2 = | 4 in 14 =



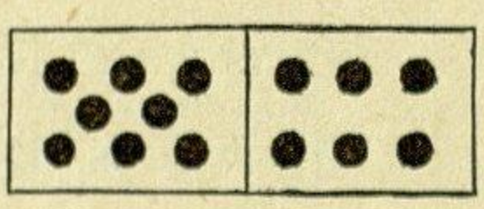
2 × 5 + 4 = | 5 in 14 =



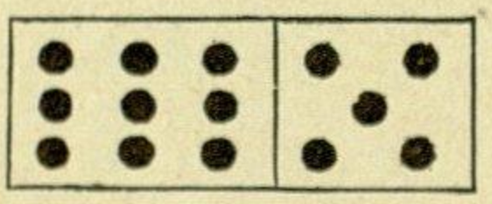
2 × 6 + 2 = | 6 in 14 =



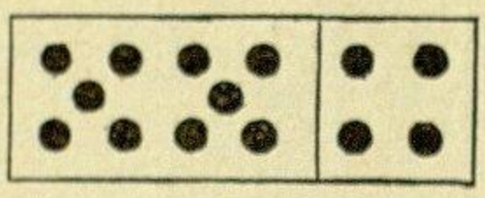
7 + 7 = | 14 − 7 = | 14 = 7 + .
2 × 7 = | 7 in 14 = | 1/2 v. 14 =



8 + 6 = | 14 − 6 = | 14 = 8 + .
6 + 8 = | 14 − 8 = | 14 = 6 + .
1 × 8 + 6 = | 8 in 14 =



9 + 5 = | 14 − 5 = | 14 = 9 + .
5 + 9 = | 14 − 9 = | 14 = 5 + .
1 × 9 + 5 = | 9 in 14 =



10 + 4 = | 14 − 4 = | 14 = 10 + .
4 + 10 = | 14 − 10 = | 14 = 4 + .
1 × 10 + 4 = | 10 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 × 4 =	2 × 2 =	3 × 3 =	6 × 1 =	12 = . × 4
2 × 6 =	2 × 5 =	4 × 3 =	6 × 2 =	10 = . × 2
2 × 3 =	3 × 4 =	4 × 2 =	7 × 2 =	14 = 2 × .
2 × 7 =	3 × 2 =	5 × 2 =	8 × 1 =	9 = 3 × .

— 6. —

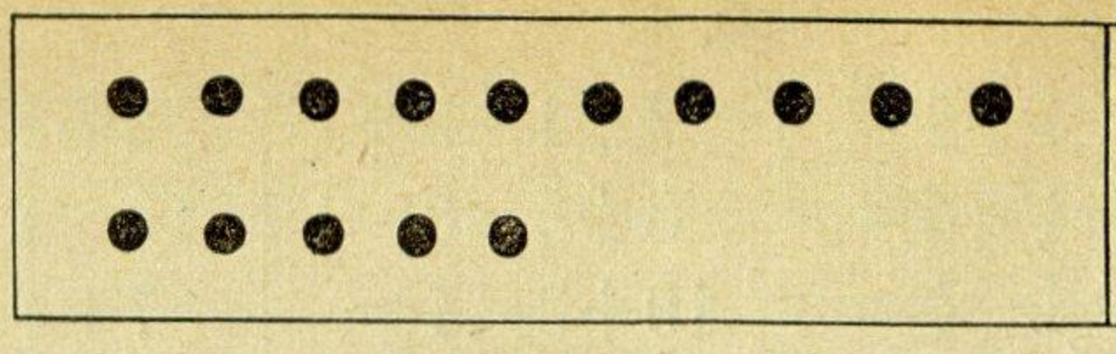
2 in 6 =	3 in 12 =	2 in 14 =	2 in 13 =
4 in 12 =	2 in 8 =	2 in 4 =	3 in 10 =
7 in 14 =	4 in 8 =	3 in 3 =	4 in 14 =
3 in 9 =	2 in 10 =	2 in 12 =	5 in 12 =
5 in 10 =	3 in 6 =	8 in 8 =	6 in 11 =

— 7. —

1/3 v. 6 =	1/8 v. 8 =	1/3 v. 12 =	1/2 v. 10 =
1/5 v. 10 =	1/6 v. 12 =	1/7 v. 14 =	1/4 v. 8 =
1/4 v. 12 =	1/3 v. 9 =	1/4 v. 4 =	1/6 v. 6 =
1/2 v. 14 =	1/2 v. 4 =	1/2 v. 8 =	1/2 v. 12 =

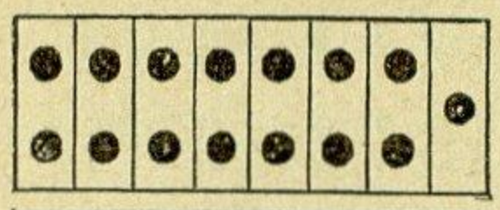
— 8. —

3 × 3 + 5 =	5 × 2 + 4 =	1/7 v. 14 + 8 =
2 × 7 − 6 =	2 × 6 − 9 =	1/3 v. 12 − 3 =
4 × 2 + 4 =	2 × 2 + 7 =	1/2 v. 4 + 5 =
2 × 4 − 3 =	7 × 2 − 8 =	1/2 v. 14 − 2 =

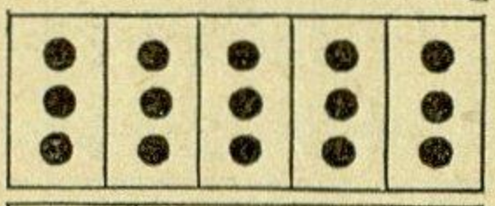


15

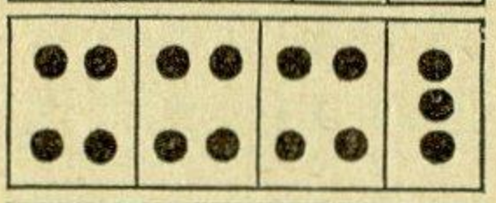
15 × 1 = | 1 in 15 =



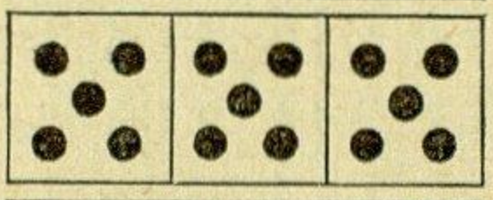
7 × 2 + 1 = | 2 in 15 =



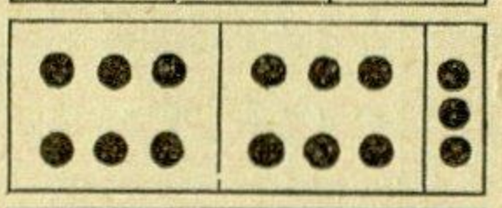
5 × 3 = | 3 in 15 = | 1/5 v. 15 =



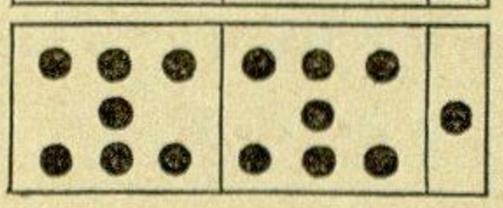
3 × 4 + 3 = | 4 in 15 =



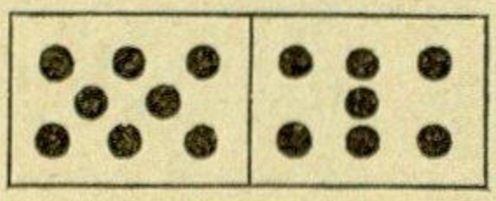
3 × 5 = | 5 in 15 = | 1/3 v. 15 =



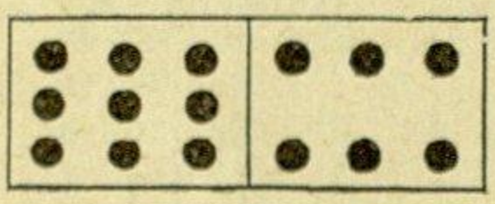
2 × 6 + 3 = | 6 in 15 =



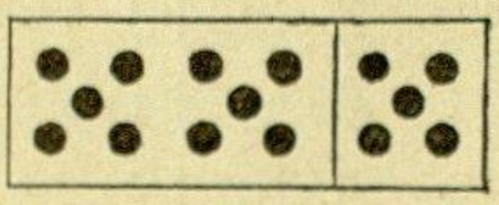
2 × 7 + 1 = | 7 in 15 =



8 + 7 = | 15 − 7 = | 15 = 8 + .
7 + 8 = | 15 − 8 = | 15 = 7 + .
1 × 8 + 7 = | 8 in 15 =



9 + 6 = | 15 − 6 = | 15 = 9 + .
6 + 9 = | 15 − 9 = | 15 = 6 + .
1 × 9 + 6 = | 9 in 15 =



10 + 5 = | 15 − 5 = | 15 = 10 + .
5 + 10 = | 15 − 10 = | 15 = 5 + .
1 × 10 + 5 = | 10 in 15 =

— 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 × 4 =	3 × 2 =	5 × 3 =	7 × 2 =	15 = . × 3
3 × 5 =	2 × 6 =	2 × 7 =	4 × 3 =	12 = . × 4
4 × 2 =	3 × 4 =	5 × 2 =	6 × 2 =	10 = 2 × .
2 × 5 =	2 × 2 =	3 × 3 =	2 × 3 =	15 = 5 × .

— 7. —

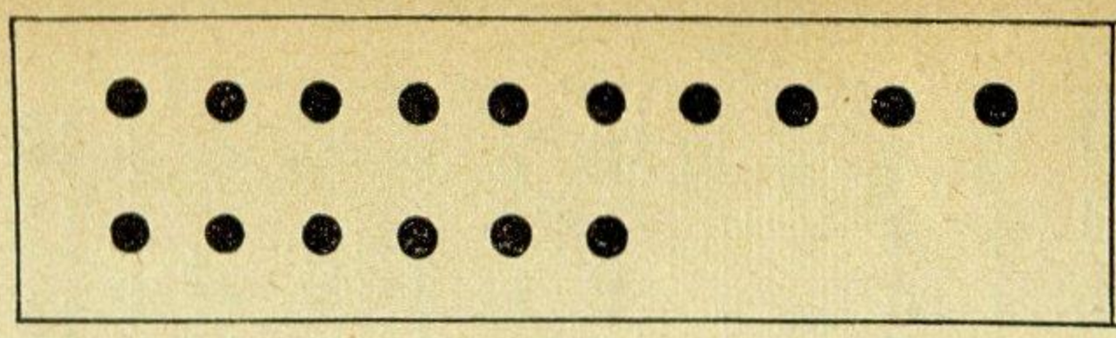
2 in 8 =	2 in 10 =	2 in 12 =	2 in 14 =	2 in 15 =
3 in 8 =	3 in 10 =	3 in 12 =	3 in 14 =	3 in 15 =
4 in 8 =	4 in 10 =	4 in 12 =	5 in 14 =	4 in 15 =
5 in 8 =	5 in 10 =	6 in 12 =	7 in 14 =	5 in 15 =

— 8. —

1/2 v. 12 =	1/5 v. 10 =	1/8 v. 8 =	1/3 v. 3 =
1/3 v. 6 =	1/4 v. 8 =	1/5 v. 15 =	1/7 v. 14 =
1/2 v. 4 =	1/2 v. 8 =	1/2 v. 10 =	1/3 v. 9 =
1/3 v. 12 =	1/3 v. 15 =	1/2 v. 14 =	1/4 v. 12 =

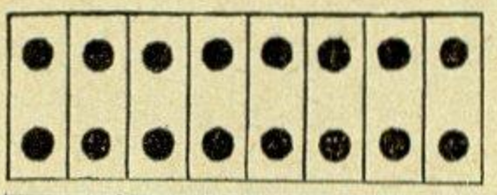
— 9. —

5 × 2 + 5 =	3 × 5 − 4 =	1/5 v. 15 + 5 =
2 × 6 − 3 =	4 × 3 + 3 =	1/2 v. 14 − 3 =
7 × 2 + 1 =	2 × 7 − 5 =	1/4 v. 12 + 9 =

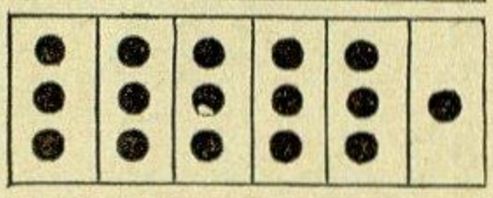


16

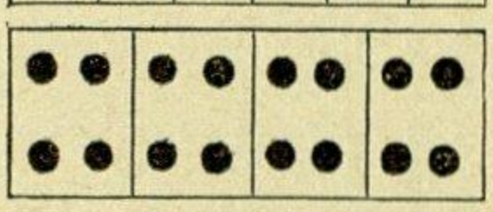
16 × 1 = | 1 in 16 =



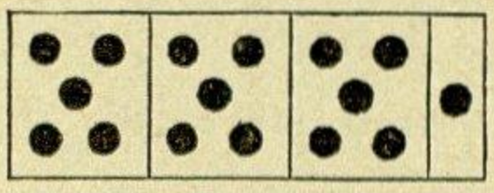
8 × 2 = | 2 in 16 = | 1/8 v. 16 =



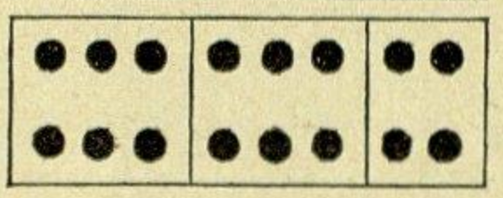
5 × 3 + 1 = | 3 in 16 =



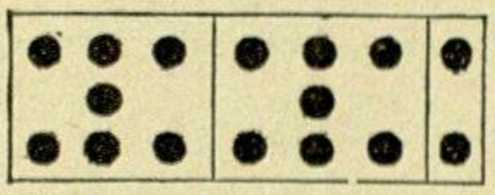
4 × 4 = | 4 in 16 = | 1/4 v. 16 =



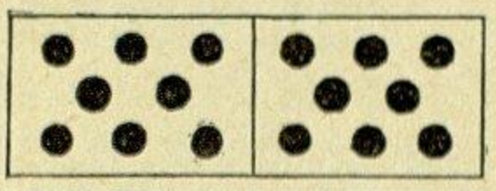
3 × 5 + 1 = | 5 in 16 =



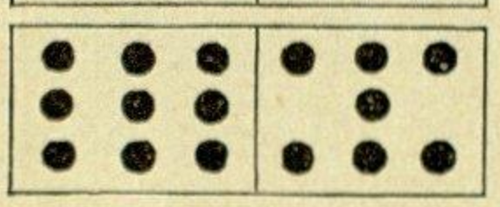
2 × 6 + 4 = | 6 in 16 =



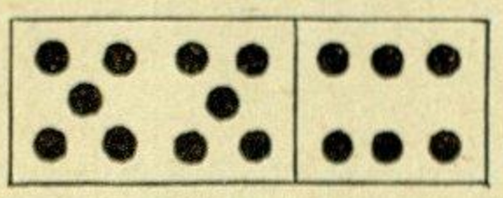
2 × 7 + 2 = | 7 in 16 =



8 + 8 = | 16 − 8 = | 16 = 8 + .
2 × 8 = | 8 in 16 = | 1/2 v. 16 =



9 + 7 = | 16 − 7 = | 16 = 9 + .
7 + 9 = | 16 − 9 = | 16 = 7 + .
1 × 9 + 7 = | 9 in 16 =



10 + 6 = | 16 − 6 = | 16 = 10 + .
6 + 10 = | 16 − 10 = | 16 = 6 + .
1 × 10 + 6 = | 10 in 16 =

— 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 × 7 =	8 × 2 =	5 × 2 =	2 × 8 =	16 = 2 × .
3 × 4 =	2 × 3 =	2 × 4 =	3 × 3 =	14 = 7 × .
4 × 4 =	2 × 5 =	7 × 2 =	4 × 2 =	12 = . × 3
5 × 3 =	4 × 3 =	3 × 5 =	2 × 6 =	16 = . × 4

— 6. —

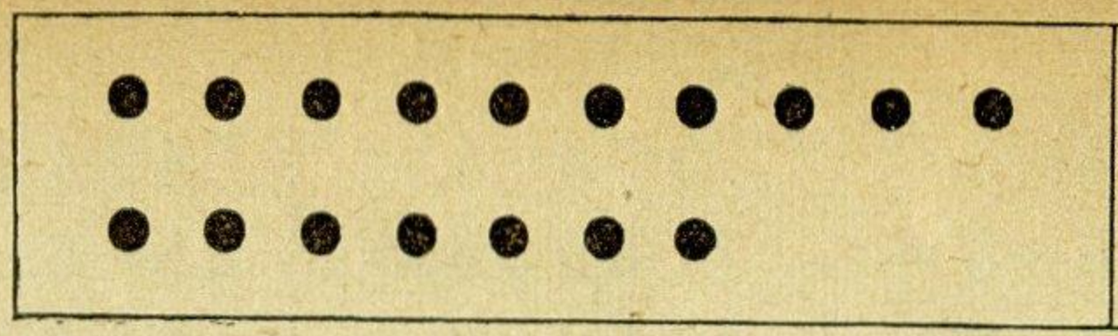
2 in 14 =	3 in 12 =	4 in 16 =	3 in 11 =	2 in 7 =
8 in 16 =	2 in 6 =	5 in 10 =	5 in 13 =	4 in 13 =
5 in 10 =	6 in 12 =	3 in 15 =	7 in 16 =	6 in 15 =
2 in 16 =	3 in 9 =	2 in 8 =	9 in 14 =	8 in 12 =

— 7. —

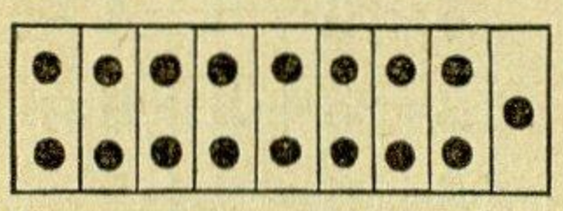
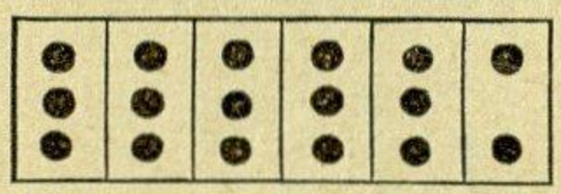
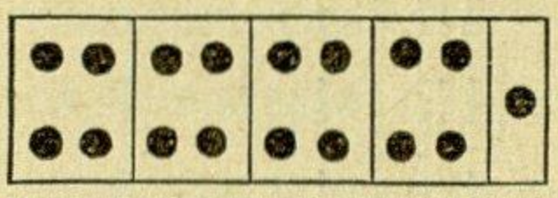
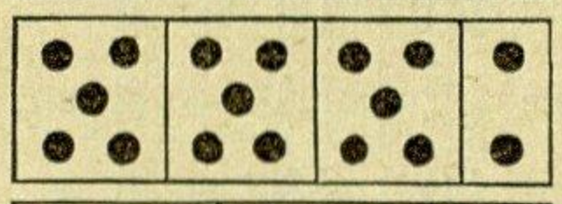
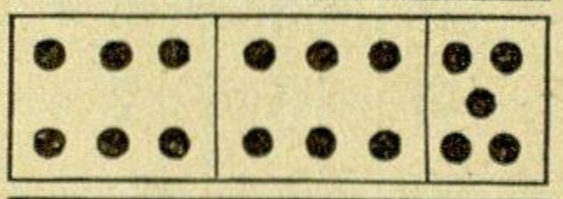
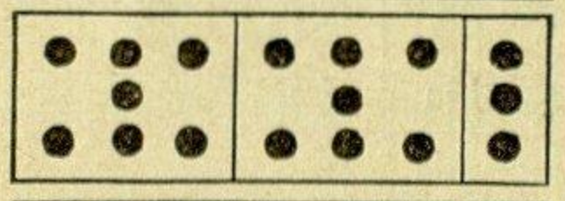
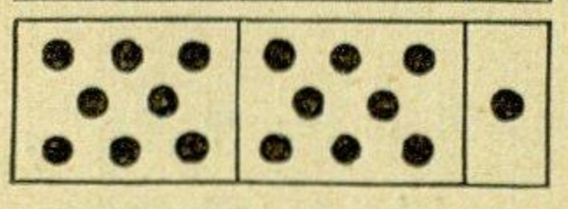
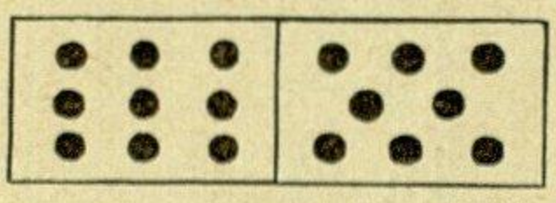
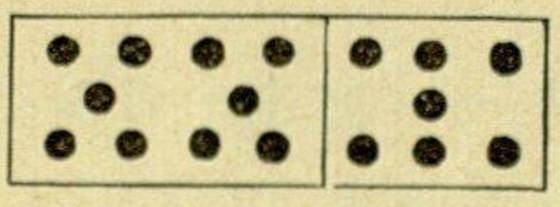
1/8 v. 16 =	1/2 v. 10 =	1/2 v. 16 =	1/2 v. 14 =
1/2 v. 6 =	1/4 v. 12 =	1/3 v. 9 =	1/3 v. 12 =
1/5 v. 10 =	1/5 v. 15 =	1/4 v. 8 =	1/4 v. 16 =
1/2 v. 4 =	1/7 v. 14 =	1/2 v. 12 =	1/3 v. 15 =

— 8. —

4 × 3 + 3 =	8 × 2 − 6 =	1/8 v. 16 + 5 =
7 × 2 − 5 =	2 × 6 + 4 =	1/3 v. 15 − 3 =
3 × 5 + 1 =	4 × 4 − 5 =	1/4 v. 12 + 6 =
2 × 8 − 4 =	5 × 2 + 3 =	1/2 v. 16 − 4 =



17

	$17 \times 1 =$	1 in $17 =$
	$8 \times 2 + 1 =$	2 in $17 =$
	$5 \times 3 + 2 =$	3 in $17 =$
	$4 \times 4 + 1 =$	4 in $17 =$
	$3 \times 5 + 2 =$	5 in $17 =$
	$2 \times 6 + 5 =$	6 in $17 =$
	$2 \times 7 + 3 =$	7 in $17 =$
	$2 \times 8 + 1 =$	8 in $17 =$
	$9 + 8 =$ | $17 - 8 =$ | $17 = 9 +$. $8 + 9 =$ | $17 - 9 =$ | $17 = 8 +$. $1 \times 9 + 8 =$ | 9 in $17 =$	
	$10 + 7 =$ | $17 - 7 =$ | $17 = 10 +$. $7 + 10 =$ | $17 - 10 =$ | $17 = 7 +$. $1 \times 10 + 7 =$ | 10 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 × 5 =	5 × 2 =	7 × 2 =	8 = . × 4	15 = 3 × .
4 × 4 =	2 × 8 =	2 × 3 =	12 = . × 3	10 = 5 × .
2 × 7 =	5 × 3 =	4 × 2 =	14 = . × 2	16 = 4 × .
3 × 3 =	2 × 6 =	8 × 2 =	16 = . × 8	12 = 3 × .

— 6. —

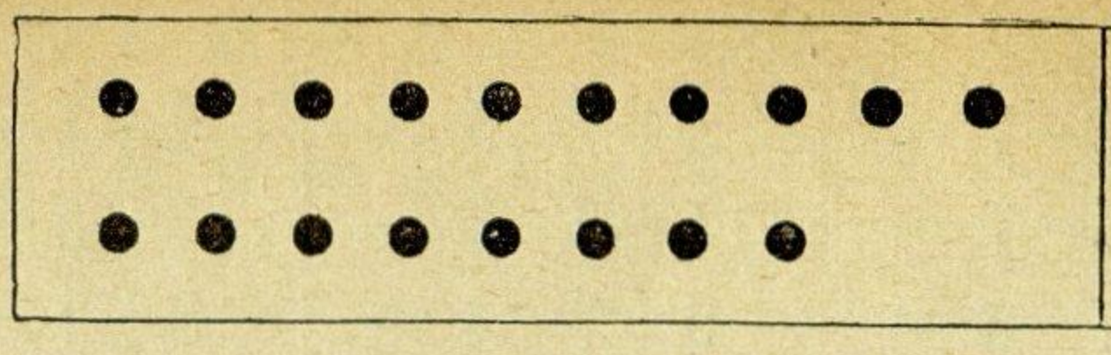
2 in 16 =	2 in 14 =	3 in 12 =	5 in 10 =	3 in 17 =
2 in 6 =	2 in 4 =	4 in 8 =	6 in 12 =	4 in 13 =
2 in 12 =	3 in 9 =	4 in 16 =	7 in 14 =	6 in 10 =
2 in 8 =	3 in 15 =	4 in 12 =	8 in 16 =	8 in 17 =
2 in 10 =	3 in 6 =	5 in 15 =	9 in 9 =	9 in 16 =

— 7. —

1/2 v. 8 =	1/3 v. 12 =	1/4 v. 8 =	1/9 v. 9 =
1/3 v. 15 =	1/8 v. 8 =	1/7 v. 7 =	1/3 v. 3 =
1/3 v. 6 =	1/2 v. 12 =	1/2 v. 6 =	1/5 v. 15 =
1/2 v. 4 =	1/5 v. 10 =	1/3 v. 12 =	1/2 v. 14 =

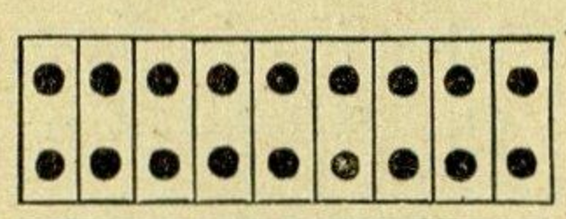
— 8. —

2 × 2 + 8 =	2 × 7 − 3 =	1/2 v. 6 + 4 =
6 × 2 + 5 =	4 × 4 − 5 =	1/3 v. 9 + 7 =
3 × 3 + 7 =	8 × 2 − 7 =	1/2 v. 14 − 7 =
2 × 5 + 6 =	4 × 3 − 6 =	1/4 v. 16 − 3 =

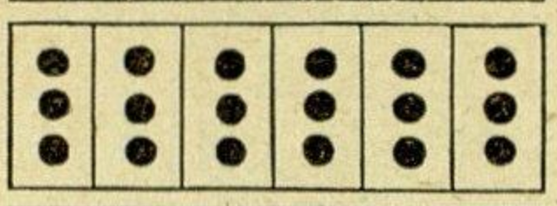


18

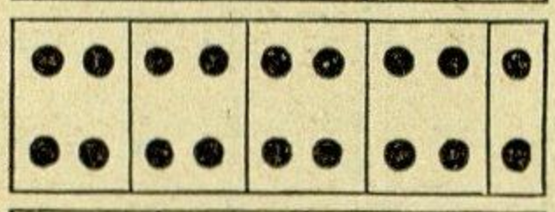
18 × 1 = | 1 in 18 =



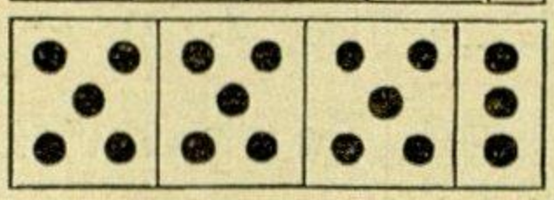
9 × 2 = | 2 in 18 = | 1/9 v. 18 =



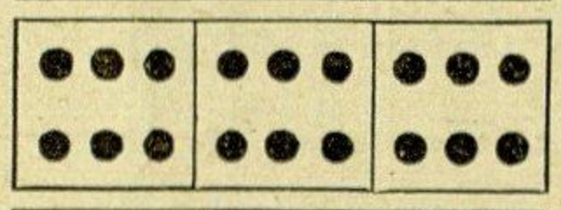
6 × 3 = | 3 in 18 = | 1/6 v. 18 =



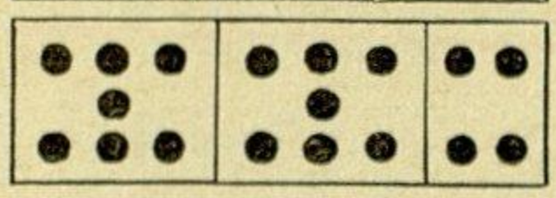
4 × 4 + 2 = | 4 in 18 =



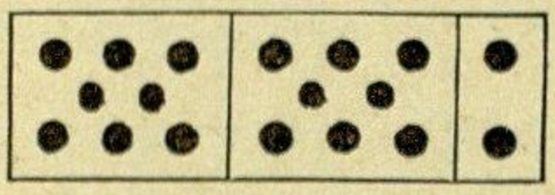
3 × 5 + 3 = | 5 in 18 =



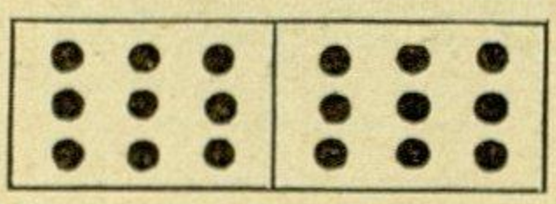
3 × 6 = | 6 in 18 = | 1/3 v. 18 =



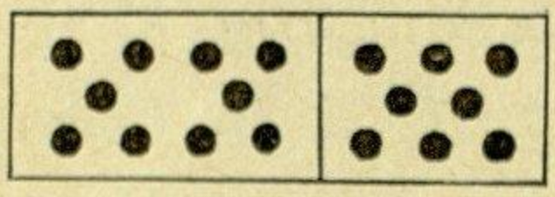
2 × 7 + 4 = | 7 in 18 =



2 × 8 + 2 = | 8 in 18 =



9 + 9 = | 18 − 9 = | 18 = 9 + .
2 × 9 = | 9 in 18 = | 1/2 v. 18 =



10 + 8 = | 18 − 8 = | 18 = 10 + .
8 + 10 = | 18 − 10 = | 18 = 8 + .

1 × 10 + 8 = | 10 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 × 4 =	2 × 9 =	6 × 3 =	4 × 3 =	14 = . × 7
2 × 7 =	3 × 5 =	7 × 2 =	9 × 2 =	15 = . × 3
3 × 6 =	2 × 8 =	5 × 3 =	2 × 6 =	16 = 2 × .
4 × 4 =	3 × 3 =	8 × 2 =	5 × 2 =	18 = 6 × .

— 6. —

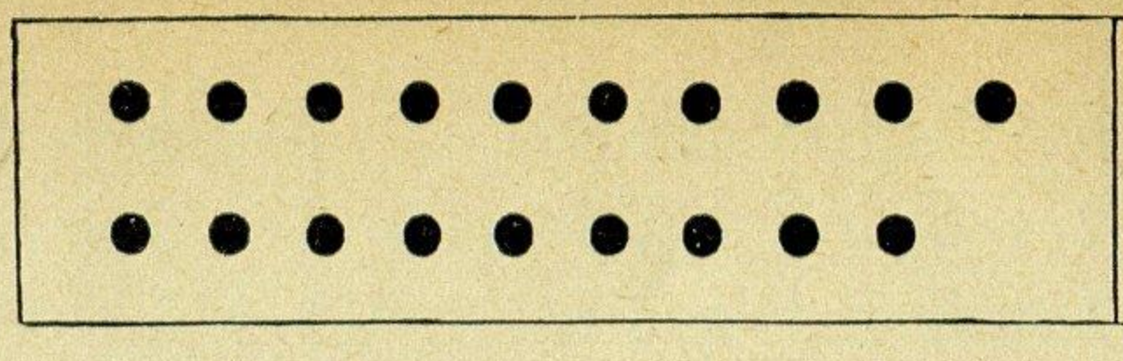
2 in 12 =	2 in 14 =	2 in 16 =	2 in 18 =	3 in 10 =
3 in 12 =	7 in 14 =	4 in 16 =	3 in 18 =	4 in 14 =
4 in 12 =	3 in 15 =	8 in 16 =	6 in 18 =	5 in 13 =
6 in 12 =	5 in 15 =	5 in 10 =	9 in 18 =	6 in 16 =

— 7. —

1/6 v. 12 =	1/8 v. 16 =	1/4 v. 16 =	1/5 v. 10 =
1/2 v. 10 =	1/5 v. 15 =	1/3 v. 18 =	1/2 v. 12 =
1/4 v. 8 =	1/7 v. 14 =	1/2 v. 14 =	1/9 v. 18 =
1/3 v. 6 =	1/6 v. 18 =	1/3 v. 12 =	1/4 v. 12 =

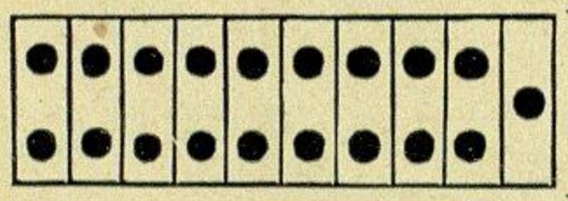
— 8. —

5 × 2 + 8 =	4 × 3 + 5 =	1/2 v. 10 + 8 =
4 × 4 − 7 =	3 × 6 − 6 =	1/3 v. 12 − 2 =
2 × 4 + 6 =	2 × 7 + 4 =	1/4 v. 16 + 7 =
3 × 3 − 5 =	9 × 2 − 8 =	1/2 v. 18 − 6 =

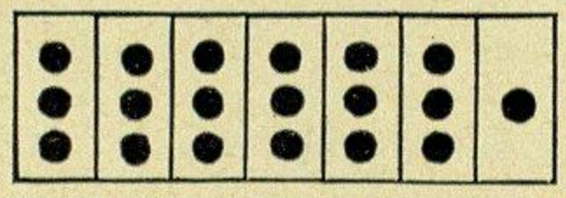


19

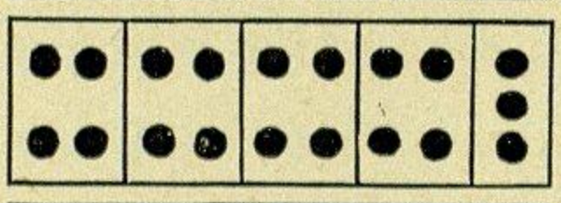
$19 \times 1 =$ | 1 in $19 =$



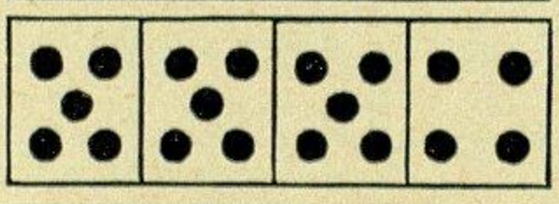
$9 \times 2 + 1 =$ | 2 in $19 =$



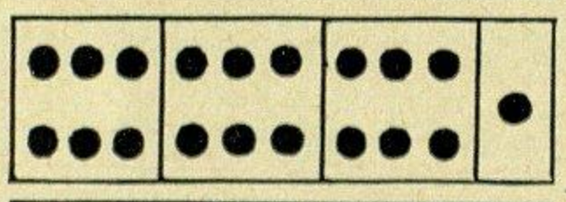
$6 \times 3 + 1 =$ | 3 in $19 =$



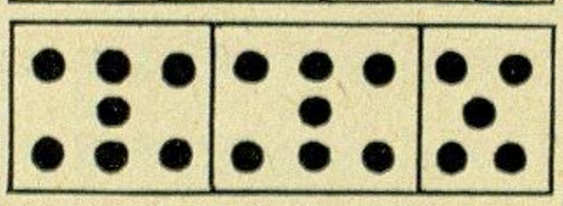
$4 \times 4 + 3 =$ | 4 in $19 =$



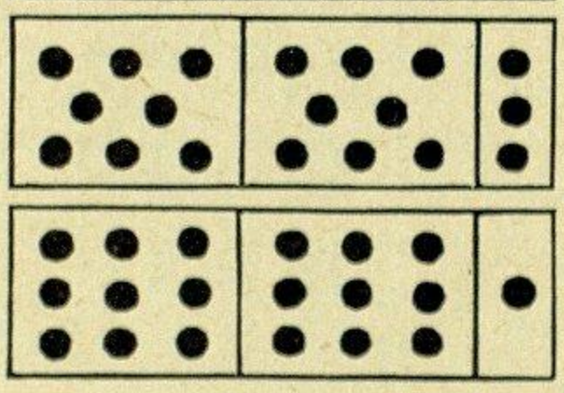
$3 \times 5 + 4 =$ | 5 in $19 =$



$3 \times 6 + 1 =$ | 6 in $19 =$

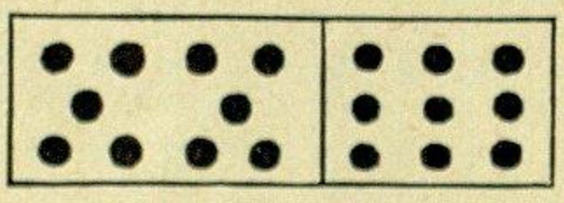


$2 \times 7 + 5 =$ | 7 in $19 =$



$2 \times 8 + 3 =$ | 8 in $19 =$

$2 \times 9 + 1 =$ | 9 in $19 =$



$10 + 9 =$ | $19 - 9 =$ | $19 = 10 +$.
$9 + 10 =$ | $19 - 10 =$ | $19 = 9 +$.
$1 \times 10 + 9 =$ | 10 in $19 =$

— **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 =	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. —

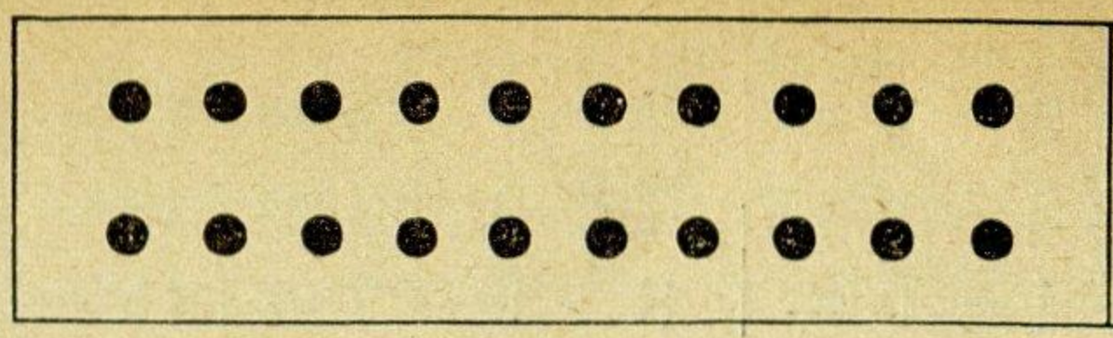
2 in 16 =	3 in 12 =	4 in 16 =	5 in 15 =	7 in 10 =
2 in 10 =	3 in 9 =	4 in 8 =	5 in 19 =	8 in 16 =
2 in 4 =	3 in 18 =	4 in 12 =	6 in 18 =	8 in 19 =
2 in 19 =	3 in 19 =	4 in 19 =	6 in 19 =	9 in 18 =

— 7. —

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

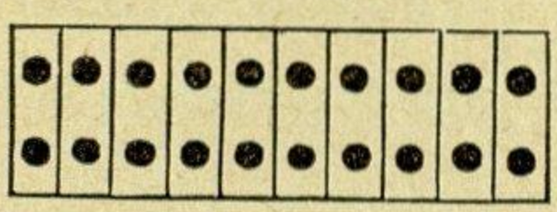
— 8. —

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

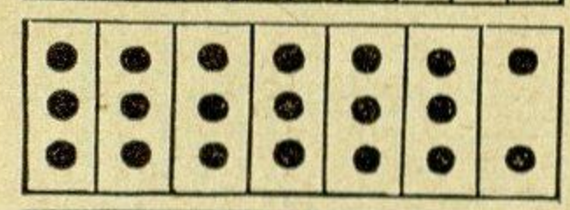


20

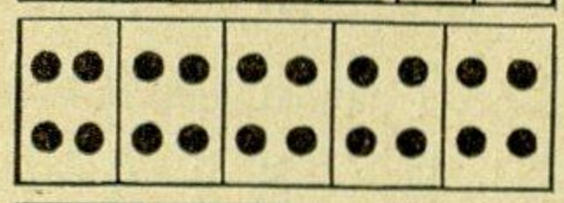
$20 \times 1 =$ | 1 in $20 =$



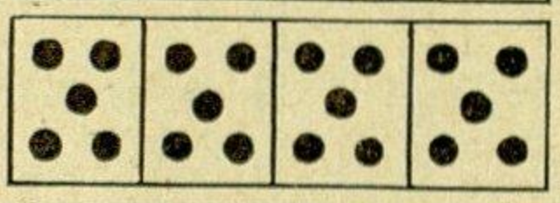
$10 \times 2 =$ | 2 in $20 =$ | $1/10$ v. $20 =$



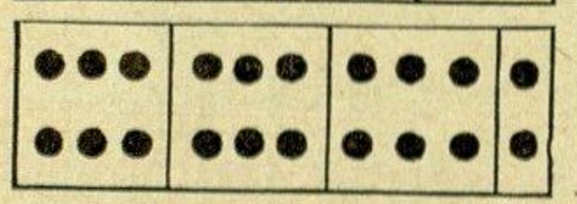
$6 \times 3 + 2 =$ | 3 in $20 =$



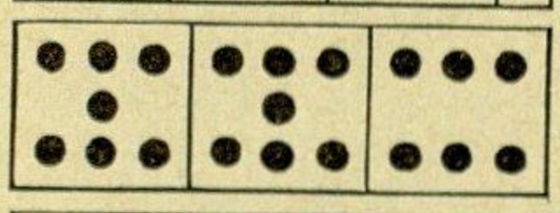
$5 \times 4 =$ | 4 in $20 =$ | $1/5$ v. $20 =$



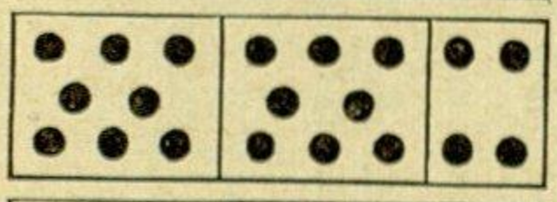
$4 \times 5 =$ | 5 in $20 =$ | $1/4$ v. $20 =$



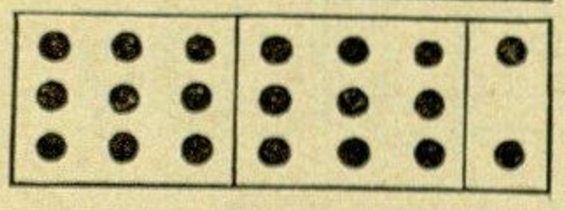
$3 \times 6 + 2 =$ | 6 in $20 =$



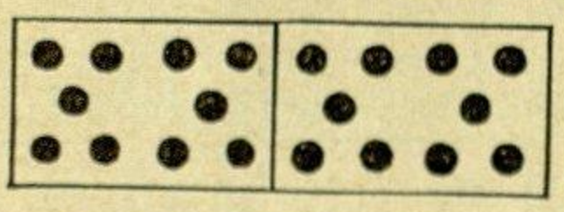
$2 \times 7 + 6 =$ | 7 in $20 =$



$2 \times 8 + 4 =$ | 8 in $20 =$



$2 \times 9 + 2 =$ | 9 in $20 =$



$10 + 10 =$ | $20 - 10 =$ | $20 = 10 +$.
$2 \times 10 =$ | 10 in $20 =$ | $1/2$ 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 × 3 =	1 × 2 =	3 × 3 =	6 = . × 3	4 = 2 × .
2 × 2 =	6 × 2 =	3 × 5 =	8 = . × 2	10 = 2 × .
2 × 5 =	3 × 2 =	3 × 4 =	8 = . × 4	10 = 5 × .
2 × 1 =	9 × 2 =	3 × 6 =	9 = . × 3	12 = 3 × .
2 × 8 =	5 × 2 =	4 × 4 =	15 = . × 3	12 = 6 × .
2 × 6 =	2 × 2 =	4 × 5 =	15 = . × 5	14 = 7 × .
2 × 9 =	10 × 2 =	4 × 3 =	20 = . × 2	16 = 4 × .
2 × 4 =	4 × 2 =	5 × 3 =	20 = . × 4	16 = 8 × .
2 × 7 =	8 × 2 =	5 × 4 =	20 = . × 5	18 = 3 × .
2 × 10 =	7 × 2 =	6 × 3 =	20 = . × 10	18 = 9 × .

— 8. —

3 × 4 − 9 =	10 × 2 − 6 =	4 × 5 − 8 =	2 × 4 + 7 =
5 × 2 + 8 =	3 × 3 + 9 =	2 × 10 − 9 =	8 × 2 − 6 =
2 × 6 − 5 =	2 × 8 − 10 =	3 × 3 + 5 =	5 × 4 − 5 =
4 × 4 + 4 =	3 × 6 − 7 =	7 × 2 + 4 =	6 × 3 + 2 =

— 9. —

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 =

— 10. —

1/2 v. 4 =	1/2 v. 8 =	1/3 v. 15 =	1/4 v. 12 =
1/2 v. 12 =	1/2 v. 14 =	1/3 v. 6 =	1/5 v. 10 =
1/2 v. 18 =	1/2 v. 20 =	1/4 v. 20 =	1/5 v. 15 =
1/2 v. 6 =	1/3 v. 12 =	1/4 v. 4 =	1/5 v. 20 =
1/2 v. 10 =	1/3 v. 18 =	1/4 v. 16 =	1/6 v. 12 =
1/2 v. 16 =	1/3 v. 9 =	1/4 v. 8 =	1/6 v. 18 =

— 11. —

1/4 v. 8 + 10 =	1/8 v. 16 + 9 =	1/9 v. 18 + 7 =
1/2 v. 18 − 8 =	1/2 v. 20 − 6 =	1/4 v. 20 − 3 =
1/5 v. 10 + 7 =	1/7 v. 14 + 8 =	1/6 v. 18 + 10 =
1/3 v. 15 − 3 =	1/5 v. 15 + 2 =	1/2 v. 16 − 5 =