

Automatiseren door splitsen

10	
1	9
2	8
3	7
4	6
5	5

9	
1	8
2	7
3	6
4	5

8	
1	7
2	6
3	5
4	4

7	
1	6
2	5
3	4

6	
1	5
2	4
3	3

5	
1	4
2	3

4	
1	3
2	2

3	
1	2

2	
1	1

Splitsen van 2

2	
1	1

--	--

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

2	
	1

1	1

2	
1	

$1 + 1 = \underline{\quad}$

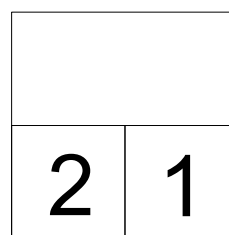
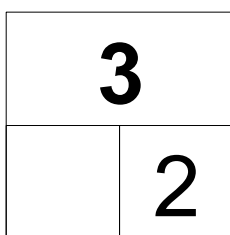
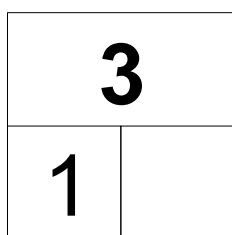
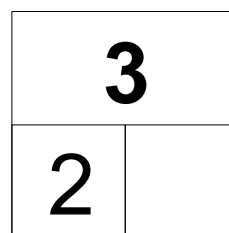
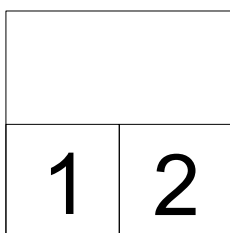
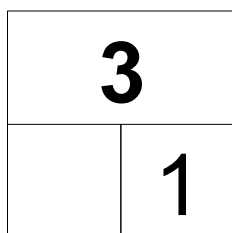
$2 - 1 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

Splitsen van 3

<table border="1"><tr><td colspan="2">3</td></tr><tr><td>1</td><td>2</td></tr></table>	3		1	2	<table border="1"><tr><td colspan="2">3</td></tr><tr><td>2</td><td>1</td></tr></table>	3		2	1
3									
1	2								
3									
2	1								
<table border="1"><tr><td style="background-color: #cccccc;"> </td><td> </td><td> </td></tr></table>				<table border="1"><tr><td> </td><td> </td><td style="background-color: #cccccc;"> </td></tr></table>					
$1 + 2 = 3$ $3 - 2 = 1$	$2 + 1 = 3$ $3 - 1 = 2$								
Als je de linkerkant weet, weet je de rechterkant ook.									



$1 + 2 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

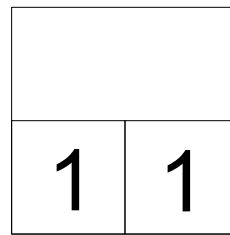
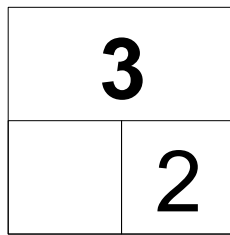
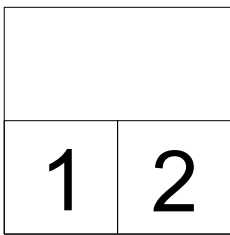
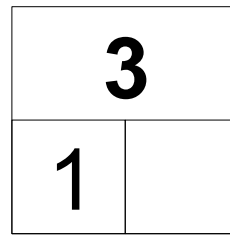
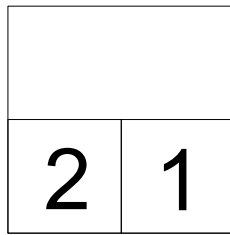
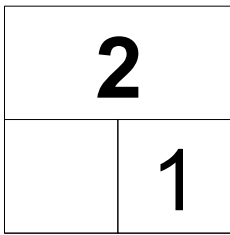
$3 - 2 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

Door elkaar (tot 3)



$1 + 1 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

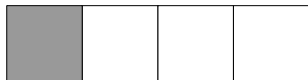
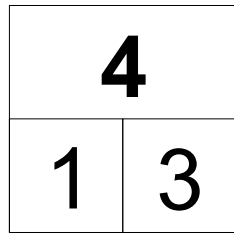
$2 + 1 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

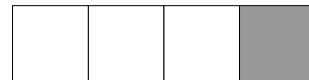
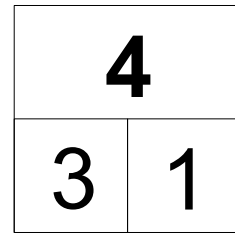
$2 - 1 = \underline{\quad}$

Splitsen van 4



$$1 + 3 = 4$$

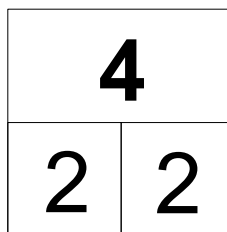
$$4 - 3 = 1$$



$$3 + 1 = 4$$

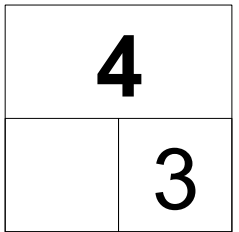
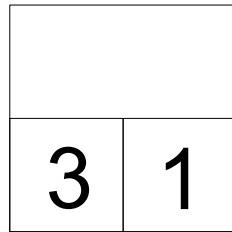
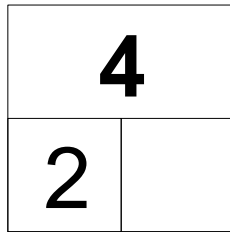
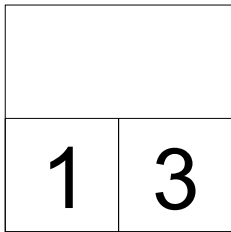
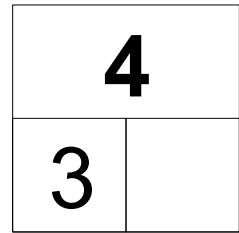
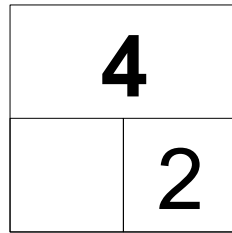
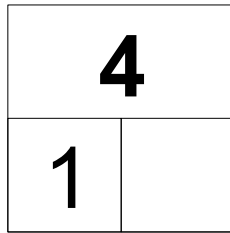
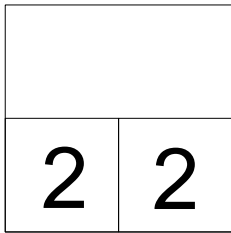
$$4 - 1 = 3$$

Als je de linkerkant weet, weet je de rechterkant ook.



$$2 + 2 = 4$$

$$4 - 2 = 2$$



$1 + 3 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

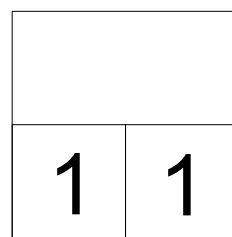
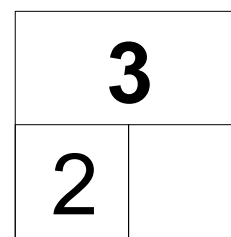
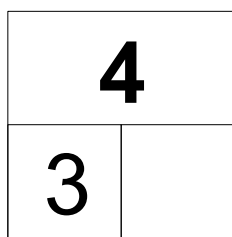
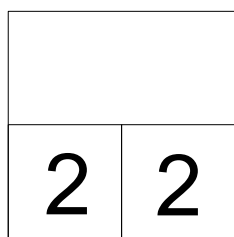
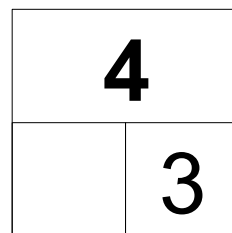
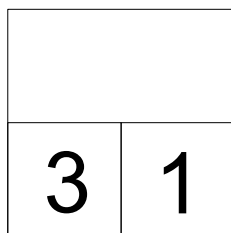
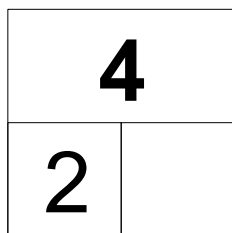
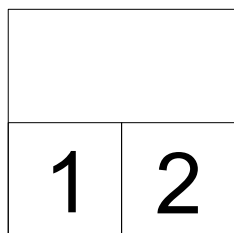
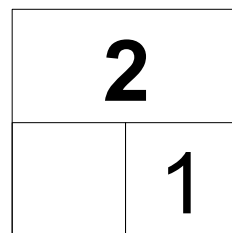
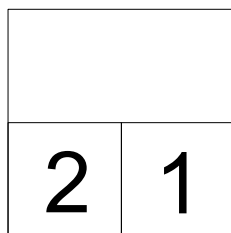
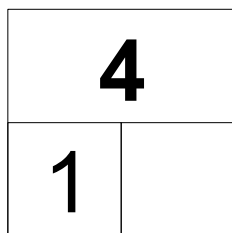
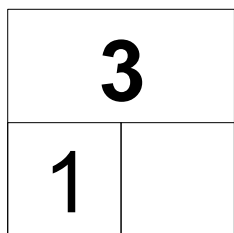
$3 + 1 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

Door elkaar (tot 4)



$2 + 1 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

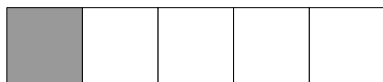
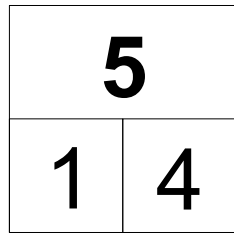
$3 + 1 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

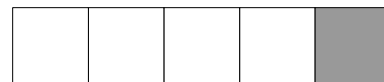
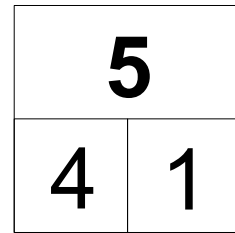
$4 - 2 = \underline{\quad}$

Splitsen van 5



$$1 + 4 = 5$$

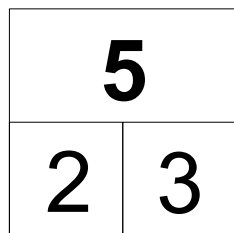
$$5 - 4 = 1$$



$$4 + 1 = 5$$

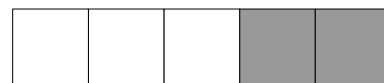
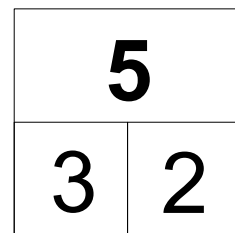
$$5 - 1 = 4$$

Als je de linkerkant weet, weet je de rechterkant ook.



$$2 + 3 = 5$$

$$5 - 3 = 2$$



$$3 + 2 = 5$$

$$5 - 2 = 3$$

Als je de linkerkant weet, weet je de rechterkant ook.

5	
4	

2	3

5	
1	

5	
3	

1	4

5	
	2

5	
2	

4	1

$2 + 3 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

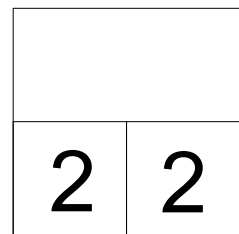
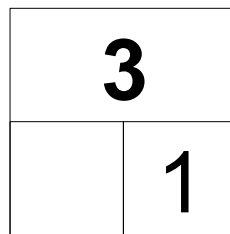
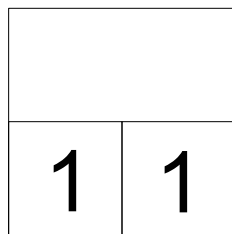
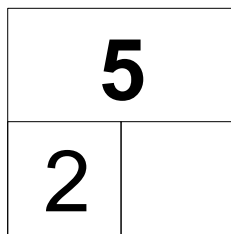
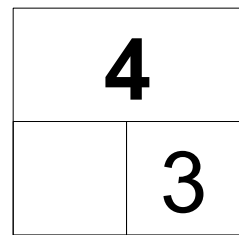
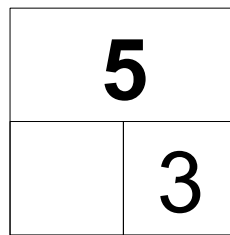
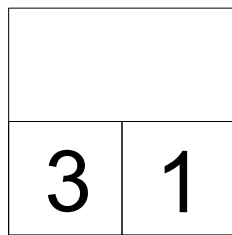
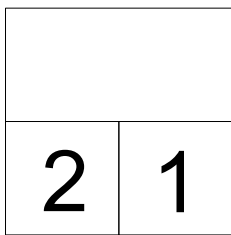
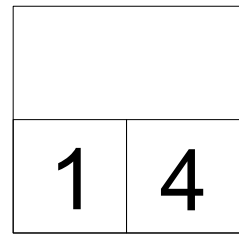
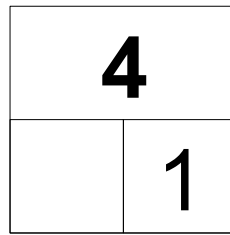
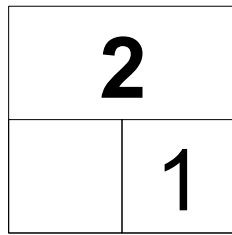
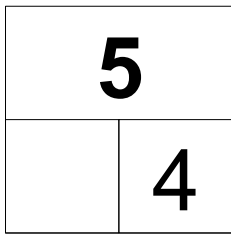
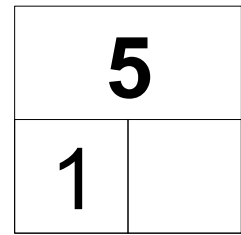
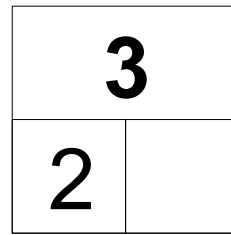
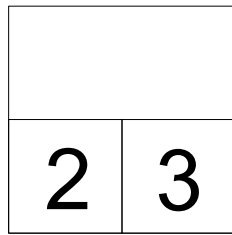
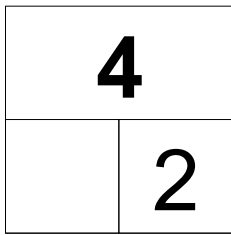
$4 + 1 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

Door elkaar (tot 5)



$2 + 1 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

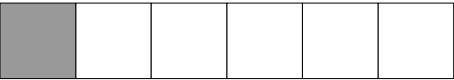
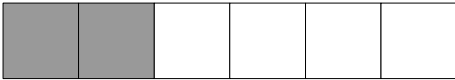
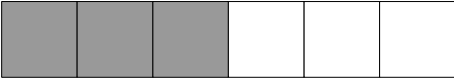
$4 - 1 = \underline{\quad}$

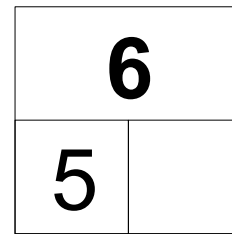
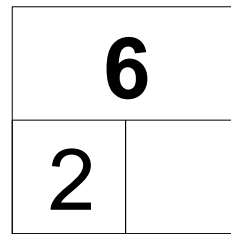
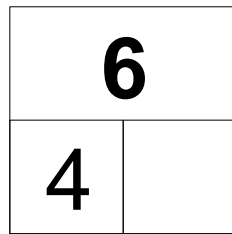
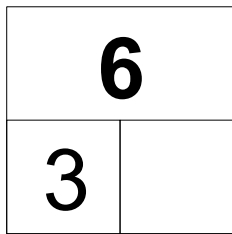
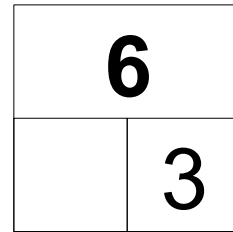
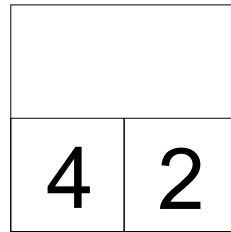
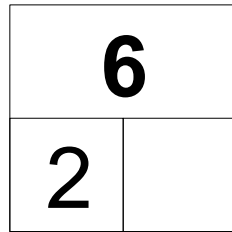
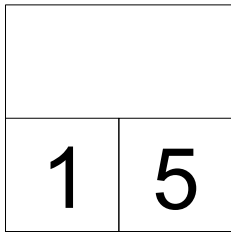
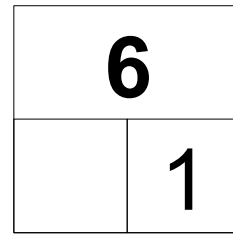
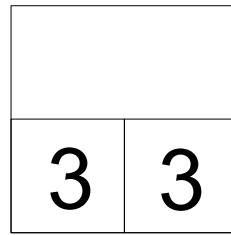
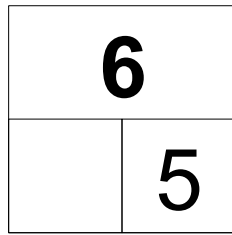
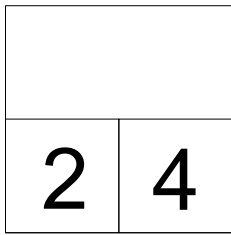
$5 - 3 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

Splitsen van 6

Let op. We laten niet meer alle omdraaiingen zien. Die moet je nu zelf bedenken!

<table border="1" style="margin: 0 auto;"><tr><td colspan="2" style="padding: 5px;">6</td></tr><tr><td style="padding: 5px;">1</td><td style="padding: 5px;">5</td></tr></table>  $1 + 5 = 6$ $5 + 1 = 6$ $6 - 5 = 1$ $6 - 1 = 5$	6		1	5	<table border="1" style="margin: 0 auto;"><tr><td colspan="2" style="padding: 5px;">6</td></tr><tr><td style="padding: 5px;">2</td><td style="padding: 5px;">4</td></tr></table>  $2 + 4 = 6$ $4 + 2 = 6$ $6 - 4 = 2$ $6 - 2 = 4$	6		2	4
6									
1	5								
6									
2	4								
<table border="1" style="margin: 0 auto;"><tr><td colspan="2" style="padding: 5px;">6</td></tr><tr><td style="padding: 5px;">3</td><td style="padding: 5px;">3</td></tr></table>  $3 + 3 = 6$ $6 - 3 = 3$		6		3	3				
6									
3	3								



$3 + 3 = \underline{\quad}$

$6 - 3 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$5 + 1 = \underline{\quad}$

$1 + 5 = \underline{\quad}$

$6 - 5 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$2 + 4 = \underline{\quad}$

$6 - 2 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$2 + 4 = \underline{\quad}$

$1 + 5 = \underline{\quad}$

Door elkaar (tot 6)

6	
1	

2	
	1

4	2

3	1

5	
3	

3	3

4	
1	3

2	3

3	
2	

2	2

1	4

6	
	5

6	
3	

2	
1	1

5	
4	

4	
	2

5	
	1

6	
2	

1	2

4	
	1

$5 + 1 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$5 + 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$5 + 1 = \underline{\quad}$

$2 + 4 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

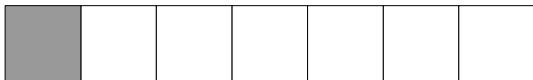
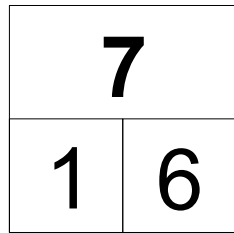
$2 - 1 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

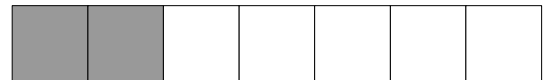
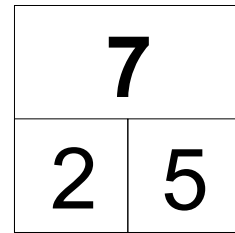
$2 - 1 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

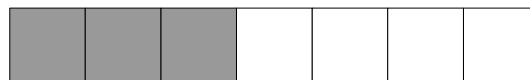
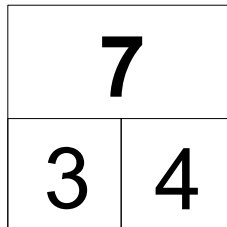
Splitsen van 7



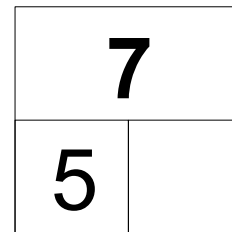
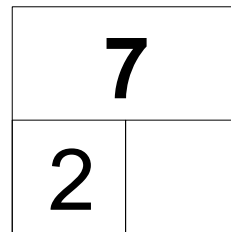
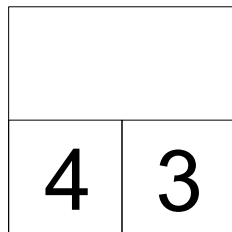
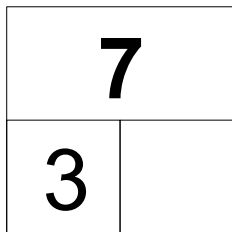
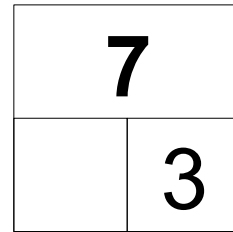
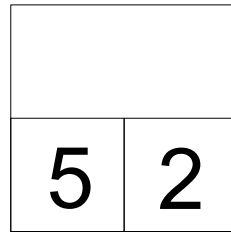
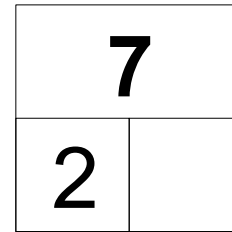
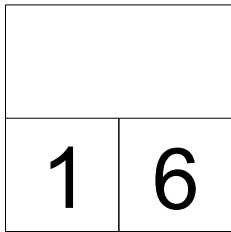
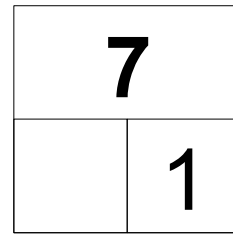
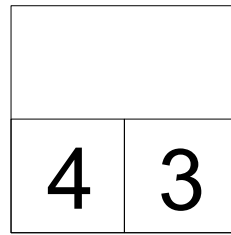
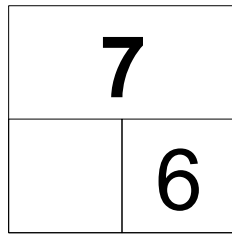
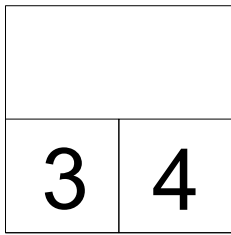
$$1 + 6 = 7$$
$$6 + 1 = 7$$
$$7 - 6 = 1$$
$$7 - 1 = 6$$



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



$$3 + 4 = 7$$
$$4 + 3 = 7$$
$$7 - 4 = 3$$
$$7 - 3 = 4$$



$7 - 6 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$7 - 6 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$7 - 5 = \underline{\quad}$

$7 - 3 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$6 + 1 = \underline{\quad}$

Door elkaar (tot 7)

3	3

7	
2	

5	
	2

1	6

5	
	4

4	2

7	
	4

3	
2	

2	5

6	
1	

2	
1	

7	
1	

1	3

4	3

7	
	6

3	2

7	
3	

6	
2	

4	
2	

7	
5	

$2 + 3 = \underline{\quad}$

$1 + 5 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$4 + 3 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$6 + 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$5 + 2 = \underline{\quad}$

$7 - 1 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$6 - 5 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$7 - 3 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$6 - 5 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$1 + 6 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$5 + 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$1 + 5 = \underline{\quad}$

$7 - 6 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$7 - 5 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$6 + 1 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

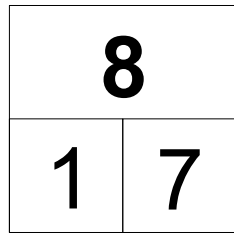
$2 + 3 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

Splitsen van 8

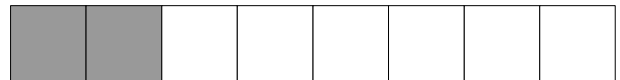
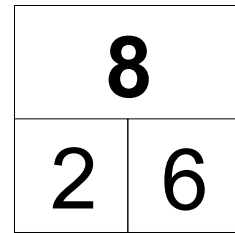


$$1 + 7 = 8$$

$$7 + 1 = 8$$

$$8 - 7 = 1$$

$$8 - 1 = 7$$

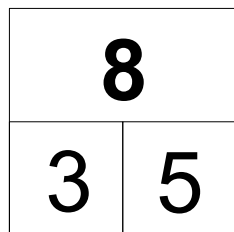


$$2 + 6 = 8$$

$$6 + 2 = 8$$

$$8 - 6 = 2$$

$$8 - 2 = 6$$

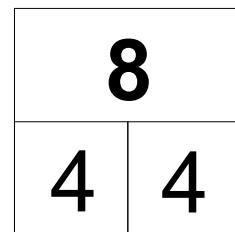


$$3 + 5 = 8$$

$$5 + 3 = 8$$

$$8 - 5 = 3$$

$$8 - 3 = 5$$



$$4 + 4 = 8$$

$$8 - 4 = 4$$

8	
	4

8	
	5

1	7

8	
	6

8	
	2

3	5

8	
	3

8	
4	

5	3

8	
1	

8	
2	

8	
6	

4	4

7	1

8	
5	

8	
	7

8	
	1

8	
3	

2	6

3	5

$7 + 1 = \underline{\quad}$

$8 - 2 = \underline{\quad}$

$8 - 5 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$6 + 2 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$3 + 5 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$2 + 6 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$7 + 1 = \underline{\quad}$

$5 + 3 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$1 + 7 = \underline{\quad}$

$6 + 2 = \underline{\quad}$

$3 + 5 = \underline{\quad}$

$8 - 2 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$7 + 1 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$8 - 5 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$8 - 2 = \underline{\quad}$

$2 + 6 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

Door elkaar (tot 8)

7	
3	

2	3

8	
1	

6	
5	

8	
	4

3	
	1

2	5

8	
3	

2	4

7	
1	

8	
	5

5	
	1

1	7

1	1

1	4

7	
	5

6	
	3

3	4

4	
2	

8	
6	

3	5

7	
6	

2	3

8	
2	

6	
	4

4	4

4	
	1

5	1

7	
	4

4	
2	

1	6

2	1

3	3

5	
3	

6	
2	

8	
7	

2	6

6	
	1

5	
	4

7	
2	

$2 + 6 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$1 + 6 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$1 + 6 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$5 + 3 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$6 + 2 = \underline{\quad}$

$7 + 1 = \underline{\quad}$

$2 + 4 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$6 - 2 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$7 - 5 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$7 - 3 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$4 + 2 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$3 + 5 = \underline{\quad}$

$5 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$1 + 7 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$8 - 5 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

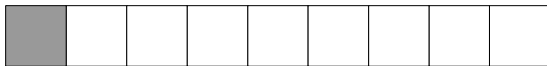
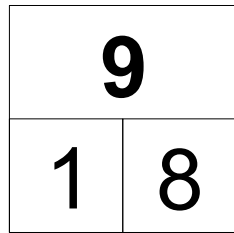
$7 - 4 = \underline{\quad}$

$7 - 1 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$6 - 5 = \underline{\quad}$

Splitsen van 9

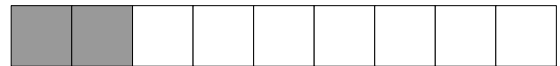
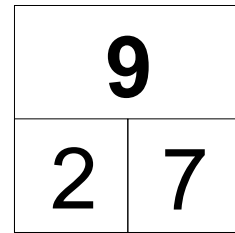


$$1 + 8 = 9$$

$$8 + 1 = 9$$

$$9 - 8 = 1$$

$$9 - 1 = 8$$

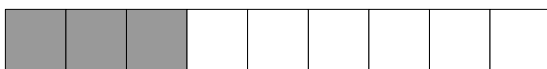
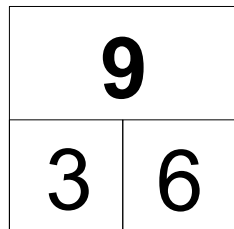


$$2 + 7 = 9$$

$$7 + 2 = 9$$

$$9 - 7 = 2$$

$$9 - 2 = 7$$

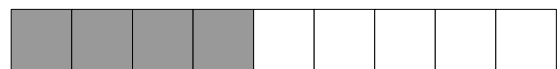
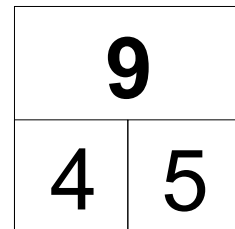


$$3 + 6 = 9$$

$$6 + 3 = 9$$

$$9 - 6 = 3$$

$$9 - 3 = 6$$



$$4 + 5 = 9$$

$$5 + 4 = 9$$

$$9 - 5 = 4$$

$$9 - 4 = 5$$

9	
	4

4	5

1	8

9	
	6

9	
	2

3	6

9	
	3

9	
5	

6	3

9	
1	

9	
2	

9	
7	

5	4

8	1

9	
6	

9	
	8

9	
	1

9	
3	

2	7

9	
	5

$6 + 3 = \underline{\quad}$

$4 + 5 = \underline{\quad}$

$2 + 7 = \underline{\quad}$

$9 - 2 = \underline{\quad}$

$8 + 1 = \underline{\quad}$

$2 + 7 = \underline{\quad}$

$4 + 5 = \underline{\quad}$

$9 - 4 = \underline{\quad}$

$1 + 8 = \underline{\quad}$

$9 - 2 = \underline{\quad}$

$9 - 6 = \underline{\quad}$

$9 - 3 = \underline{\quad}$

$9 - 5 = \underline{\quad}$

$3 + 6 = \underline{\quad}$

$9 - 7 = \underline{\quad}$

$7 + 2 = \underline{\quad}$

$9 - 2 = \underline{\quad}$

$7 + 2 = \underline{\quad}$

$9 - 5 = \underline{\quad}$

$6 + 3 = \underline{\quad}$

$4 + 5 = \underline{\quad}$

$9 - 5 = \underline{\quad}$

$8 + 1 = \underline{\quad}$

$9 - 3 = \underline{\quad}$

$7 + 2 = \underline{\quad}$

$9 - 6 = \underline{\quad}$

$7 + 2 = \underline{\quad}$

$9 - 2 = \underline{\quad}$

$9 - 1 = \underline{\quad}$

$5 + 4 = \underline{\quad}$

$9 - 6 = \underline{\quad}$

$9 - 8 = \underline{\quad}$

Door elkaar (tot 9)

3	5

9	
1	

6	
3	

9	
	5

9	
7	2

4	3

8	
4	

3	
	1

6	
2	

5	
2	

3	6

8	
7	1

4	5

1	1

7	
2	

9	
	7

7	
1	

8	
2	

5	1

2	3

2	5

9	
2	

2	4

4	4

9	
3	

3	1

4	
	2

8	
	5

7	
	4

3	3

1	8

1	6

2	6

6	
	4

5	
	3

9	
4	

5	
1	

9	
	6

6	
5	

7	
3	

$2 + 5 = \underline{\quad}$

$7 - 4 = \underline{\quad}$

$4 + 3 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$2 + 7 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$2 + 4 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$6 + 1 = \underline{\quad}$

$5 - 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$9 - 6 = \underline{\quad}$

$8 + 1 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$2 + 7 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$7 - 3 = \underline{\quad}$

$5 + 1 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$2 + 6 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$9 - 3 = \underline{\quad}$

$4 + 5 = \underline{\quad}$

$9 - 8 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$9 - 2 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$3 + 6 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$8 - 7 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$9 - 8 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$7 - 3 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$6 - 2 = \underline{\quad}$

$5 + 3 = \underline{\quad}$

$8 - 2 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$6 + 2 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$3 - 1 = \underline{\quad}$

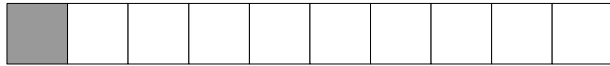
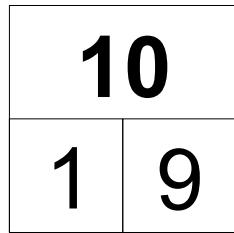
$3 + 3 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$8 + 1 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

Splitsen van 10

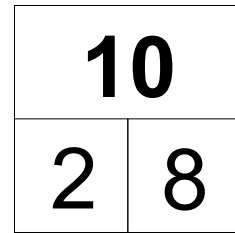


$$1 + 9 = 10$$

$$9 + 1 = 10$$

$$10 - 9 = 1$$

$$10 - 1 = 9$$

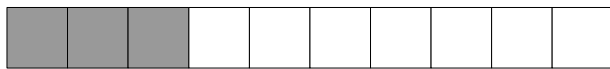
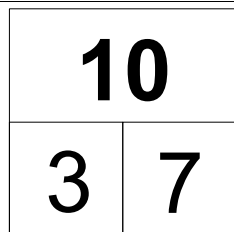


$$2 + 8 = 10$$

$$8 + 2 = 10$$

$$10 - 8 = 2$$

$$10 - 2 = 8$$

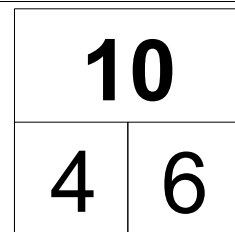


$$3 + 7 = 10$$

$$7 + 3 = 10$$

$$10 - 7 = 3$$

$$10 - 3 = 7$$

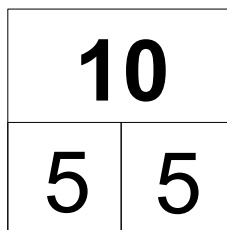


$$4 + 6 = 10$$

$$6 + 4 = 10$$

$$10 - 6 = 4$$

$$10 - 4 = 6$$



$$5 + 5 = 10$$

$$10 - 5 = 5$$

10	
	7

10	
5	

9	

2	8

10	
	9

10	
	8

7	3

4	6

10	
4	

10	
6	

10	
3	

5	5

10	
	5

10	
1	

10	
2	

10	
7	

3	7

8	2

1	9

10	
	6

$9 + 1 = \underline{\quad}$

$10 - 7 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$10 - 9 = \underline{\quad}$

$4 + 6 = \underline{\quad}$

$10 - 2 = \underline{\quad}$

$10 - 3 = \underline{\quad}$

$5 + 5 = \underline{\quad}$

$9 + 1 = \underline{\quad}$

$8 + 2 = \underline{\quad}$

$10 - 2 = \underline{\quad}$

$4 + 6 = \underline{\quad}$

$10 - 1 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$1 + 9 = \underline{\quad}$

$3 + 7 = \underline{\quad}$

$10 - 9 = \underline{\quad}$

$10 - 4 = \underline{\quad}$

$10 - 1 = \underline{\quad}$

$4 + 6 = \underline{\quad}$

$10 - 3 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$5 + 5 = \underline{\quad}$

$8 + 2 = \underline{\quad}$

$10 - 3 = \underline{\quad}$

$6 + 4 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

$9 + 1 = \underline{\quad}$

$10 - 8 = \underline{\quad}$

$10 - 7 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

Door elkaar (tot 10)

10	
2	

8	
2	

4	5

8	
4	

3	4

10	
	9

2	3

7	
	5

9	
	6

1	2

4	
2	

5	5

2	4

9	
	8

7	3

8	
3	

10	
	4

5	
	4

9	
	7

1	6

9	
1	

4	6

2	2

9	
	5

5	3

5	2

10	
	8

2	
1	

9	
	3

10	
7	

7	
	4

8	
1	

8	
	6

4	4

6	
3	

10	
	5

1	9

5	
	3

2	7

6	
4	

Alle splitsingen

10	
1	
2	
3	
4	
5	

9	
1	
2	
3	
4	

8	
1	
2	
3	
4	

7	
1	
2	
3	

6	
1	
2	
3	

5	
1	
2	

4	
1	
2	

3	
1	

2	
1	

$5 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$5 + 1 = \underline{\quad}$

$2 + 8 = \underline{\quad}$

$6 + 3 = \underline{\quad}$

$3 + 4 = \underline{\quad}$

$5 + 3 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

$2 + 6 = \underline{\quad}$

$1 + 7 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$6 + 4 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$1 + 6 = \underline{\quad}$

$5 + 5 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$6 - 1 = \underline{\quad}$

$9 - 5 = \underline{\quad}$

$2 - 1 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$8 - 3 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$10 - 1 = \underline{\quad}$

$5 - 4 = \underline{\quad}$

$7 - 2 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$10 - 8 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$5 - 2 = \underline{\quad}$

$3 + 7 = \underline{\quad}$

$7 - 1 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$10 - 8 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$8 - 6 = \underline{\quad}$

$6 + 2 = \underline{\quad}$

$9 - 7 = \underline{\quad}$

$8 + 2 = \underline{\quad}$

$3 - 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

$5 + 4 = \underline{\quad}$

$10 - 6 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$4 - 2 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$6 - 3 = \underline{\quad}$

$3 + 5 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$6 - 5 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

$10 - 5 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$6 - 4 = \underline{\quad}$

$3 + 5 = \underline{\quad}$

$5 - 3 = \underline{\quad}$

Waarom automatiseren?

Automatiseren betekent in het rekenonderwijs het 'automatisch' kunnen uitvoeren van een bepaalde som of bewerking. Je kunt een som 'automatisch' als je in een keer het antwoord weet, dus zonder te tellen en zonder tussenstapjes te gebruiken. Eigenlijk is het 'uit het hoofd leren'.

Bij alle rekenmethodes is aandacht voor automatiseren. Dat automatiseren gaat echter niet in de vorm van domweg sommen uit het hoofd leren. Er zijn namelijk best veel verschillende sommen onder de 10 te leren. Dat gaat makkelijker als je bepaalde verbanden tussen die sommen ziet.

Waarom splitsen?

Splitsen is een manier om verbanden tussen verschillende optel- en aftreksommen te leren.

Allereerst maakt splitsen de zgn. commutatieve eigenschap (verwisseleigenschap) van de optelling inzichtelijk. Deze eigenschap houdt in dat de volgorde van de verschillende termen in een optelling niet uitmaakt voor het resultaat: $3 + 5$ is hetzelfde als $5 + 3$.

Daarnaast maakt splitsen het verband tussen optel- en aftreksommen duidelijk. Je kunt twee delen samenvoegen om een geheel te vormen (optellen), maar je kunt ook van het geheel een van de delen afhalen (aftrekken). Wie het 'splitsfeit' $8 = 5 + 3$ kent, kan daarmee maar liefst 4 verschillende sommen oplossen: $3 + 5$, $5 + 3$, $8 - 5$ en $8 - 3$. Door het splitsen wordt de hoeveelheid feitjes die geleerd moet worden met een factor 4 teruggebracht.

De commutatieve eigenschap (verwisseleigenschap)

Het is belangrijk dat een kind de commutatieve eigenschap begrijpt (maar het begrip zelf hoeft hij niet te kennen!). Dit kan het beste concreet gedaan worden. Een strook (onderverdeeld in hokjes) of een rij objecten wordt in twee groepen gesplitst. De bijbehorende optelsom wordt bedacht en opgelost. Vervolgens worden de twee groepen van positie verwisseld (of het hele werkblad wordt 180° gedraaid). Nu hoort er een andere som bij. Maar de oplossing moet hetzelfde zijn, want er zijn geen objecten toegevoegd of weggehaald.

Bij alle splitsfeiten is een strook weergegeven, met een groep witte en een groep grijze hokjes. Deze strook illustreert de splitsing, en kan goed gebruikt worden om het kind aan de commutatieve eigenschap te herinneren. Bij de getallen 3, 4 en 5 zijn ook de omdraaiingen van de splitsfeiten gegeven. Ook hiermee kan de commutatieve eigenschap uitgelegd worden. Maar het is belangrijk dat het kind snapt dat deze 'extra' splitsfeiten overbodig zijn. Vanaf het getal 6 worden er geen omdraaiingen meer gegeven.

Wanneer automatiseren?

Het is goed als kinderen eerst een tijd lang sommen op allerlei manieren toepassen en uitrekenen (tellen, nadoen met concrete objecten). Want op die manier krijgen ze goed inzicht in getallen en in wat optellen en aftrekken nu precies is. Splitsen draagt weliswaar bij aan dat inzicht, maar is niet de enige manier.

Maar wanneer het optellen en aftrekken tot de 10 bij aanvang van groep 4 nog niet soepel gaat, dan is extra aandacht voor automatiseren op z'n plaats. Want in groep 4 worden de sommen snel moeilijker, en worden de bewerkingen onder de 10 een soort van hulpmiddel in het oplossen van moeilijkere sommen.

Hoe automatiseren?

Het verschilt van kind tot kind hoeveel oefening er nodig is om goed te kunnen automatiseren. Als de opgaven in dit boekje niet genoeg oefening bieden, zijn er een paar dingen die goed aansluiten en extra oefening geven:

- Maak kartonnen kaartjes met op ieder kaartje een splitsfeit. Een splitsfeit is bijvoorbeeld $8 = 3 + 5$, maar dan gepresenteerd in een vierkant zoals in dit boekje gebeurt. Een ouder of

ander kind kiest nu een kaartje uit en bedekt één van de getallen op het kaartje met zijn hand. Vervolgens toont hij het kaartje. Het kind moet nu het ontbrekende getal opnoemen. De kaartjes kunnen steeds hergebruikt worden (en er kan steeds een ander getal afgedekt worden). Als het kind bij een nieuw getal komt, kunnen er kaartjes worden toegevoegd. Als bepaalde kaartjes altijd goed gaan, kunnen ze uit de stapel verwijderd worden. Voor deze manier van werken zijn 25 kaartjes nodig.

- Voor 'zelfstandig' werken kunnen er van ieder kaartje 2 of 3 exemplaren gemaakt worden, waarbij steeds een ander getal weggelaten is. Op de achterkant van het kaartje komt dan het ontbrekende getal te staan (of eventueel alle drie de getallen). Hiermee kan het kind alleen werken, maar er zijn wel meer exemplaren nodig.

Copyright Liesbeth Flobbe, 2006. Dit document is beschikbaar onder de CC “Naamsvermelding-Gelijk delen 2.5”-licentie. Ga naar <http://creativecommons.org/licenses/by-sa/2.5/nl/> om deze licentie te bekijken.