

*answers &
annotations*

Individualized Computation

b₁





Cover Art
The Kindergarten class of Pat Spencer at La Mesa
School.

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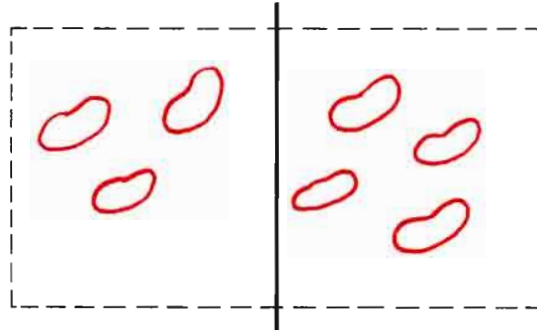
BCDE-B-3210987

Please have counters handy.

Favor de tener listos los objetos para contar.

Students use counters in the large boxes (if they wish to) and record results below or to the right as indicated.

$$\begin{array}{|c|c|} \hline 3 & 4 \\ \hline \end{array}$$



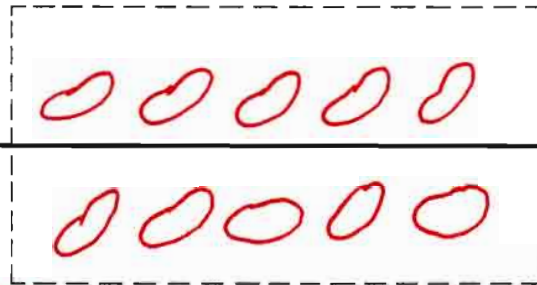
$$3 + 4 = 7$$

$$3 + 4 = 7$$

Pencil marks may be substituted for counters if children feel comfortable with that.

$$\begin{array}{r} 5 \\ + 5 \\ \hline 10 \end{array}$$

$$\begin{array}{|c|} \hline 5 \\ \hline 5 \\ \hline \end{array}$$

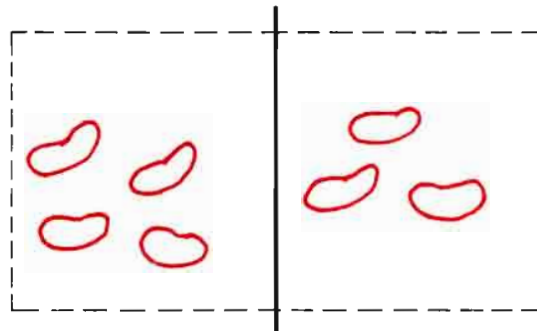


$$\begin{array}{|c|} \hline 5 \\ + 5 \\ \hline 10 \end{array}$$

Peer instruction can be a great asset in this individualized program. There is a discussion in Math For Everyone.

You might wish to remind students that not all answers are given.

$$\begin{array}{|c|c|} \hline 4 & 3 \\ \hline \end{array}$$



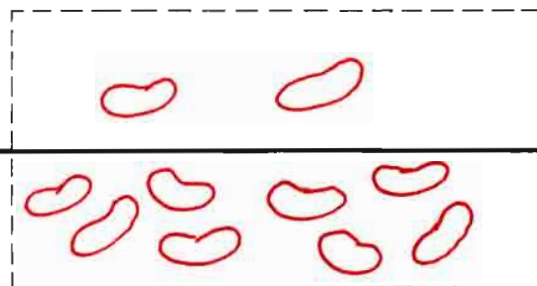
$$4 + 3 = 7$$

$$4 + 3 =$$

See also:
Drill and Practice
pp. 1-10, 40-42
52-59, 85-89
B Patterns & Problems pp 3-4

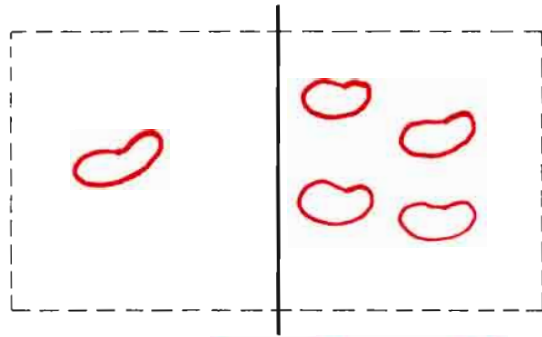
$$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 2 \\ \hline 8 \\ \hline \end{array}$$



$$\begin{array}{|c|} \hline 2 \\ + 8 \\ \hline 10 \end{array}$$

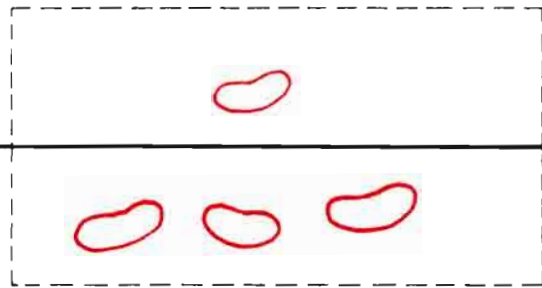
$$\begin{array}{|c|c|} \hline 1 & 4 \\ \hline \end{array}$$



$$1 + 4 = 5$$

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

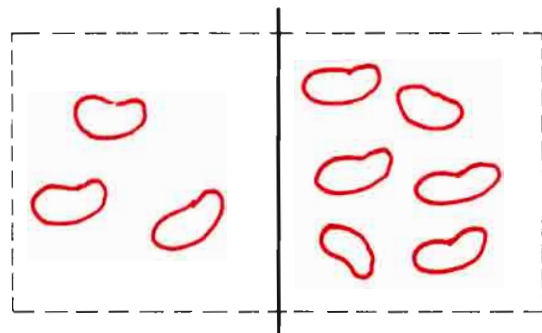
$$\begin{array}{|c|} \hline 1 \\ \hline 3 \\ \hline \end{array}$$



$$\begin{array}{|c|} \hline 1 \\ \hline + 3 \\ \hline 4 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 1 \\ \hline + 3 \\ \hline \end{array}$$

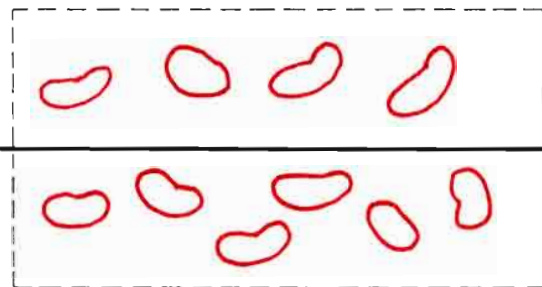
$$\begin{array}{|c|c|} \hline 3 & 6 \\ \hline \end{array}$$



$$3 + 6 = 9$$

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

$$\begin{array}{|c|} \hline 4 \\ \hline 6 \\ \hline \end{array}$$



$$\begin{array}{|c|} \hline 4 \\ \hline + 6 \\ \hline 10 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 4 \\ \hline + 6 \\ \hline \end{array}$$

Here students simply total upper half, lower half, left half, right half and all together. Counters or pencil marks may be used as needed.

A.

5
9

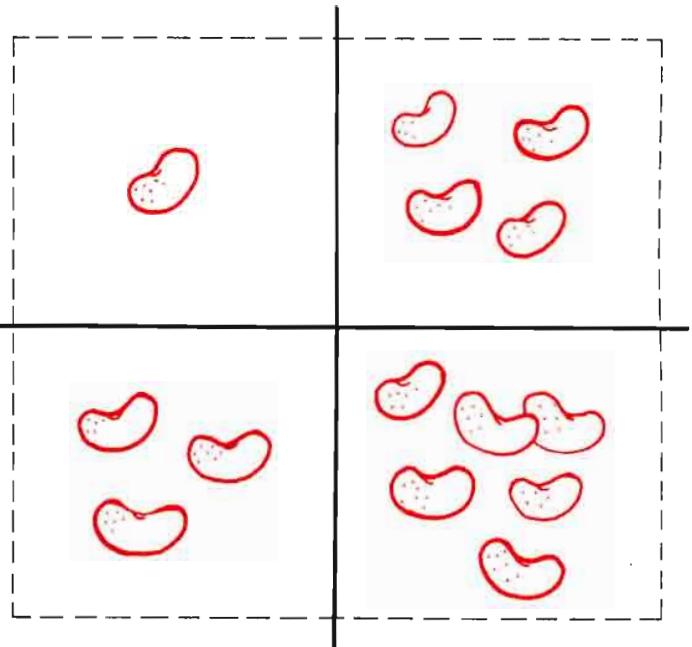
B.

10	

C.

14

1	4
3	6



A.

5
9

B.

4	10
---	----

C.

14

total

D.

6

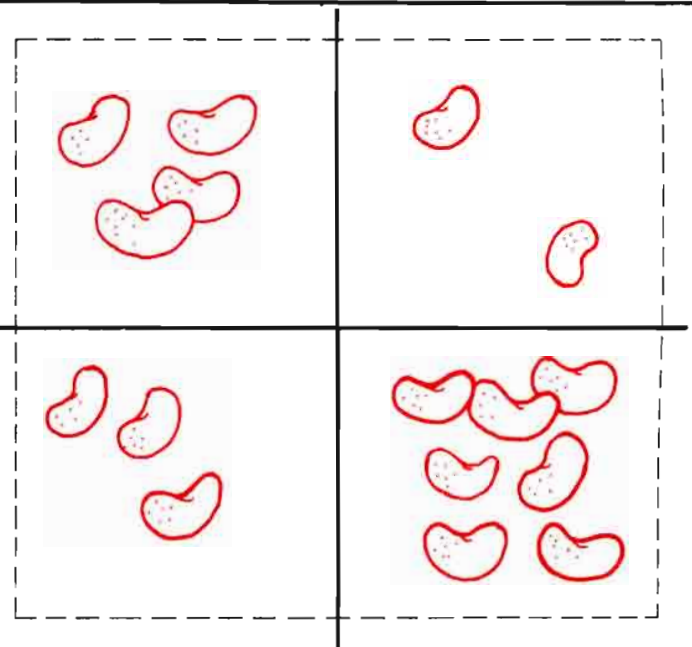
E.

7	
---	--

F.

--

4	2
3	7



D.

6
10

E.

7	9
---	---

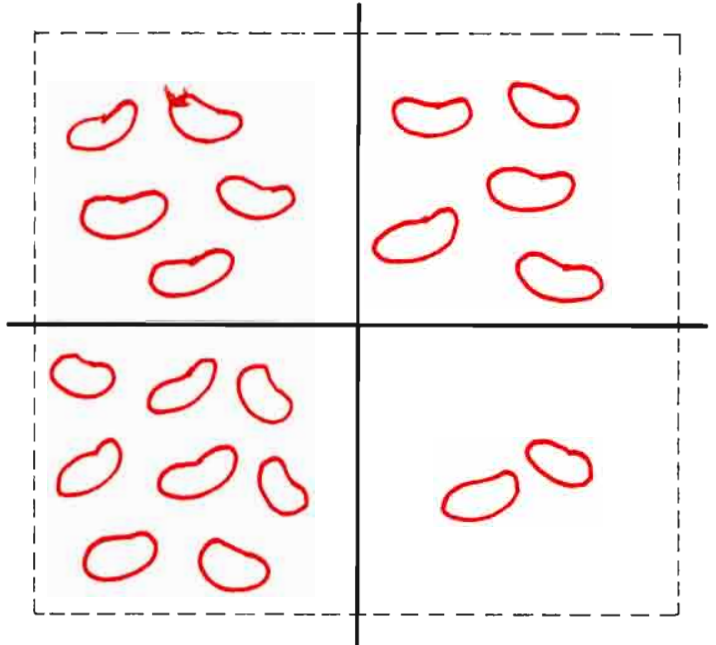
F.

16

total

5	5
8	2

A.	
10	
10	



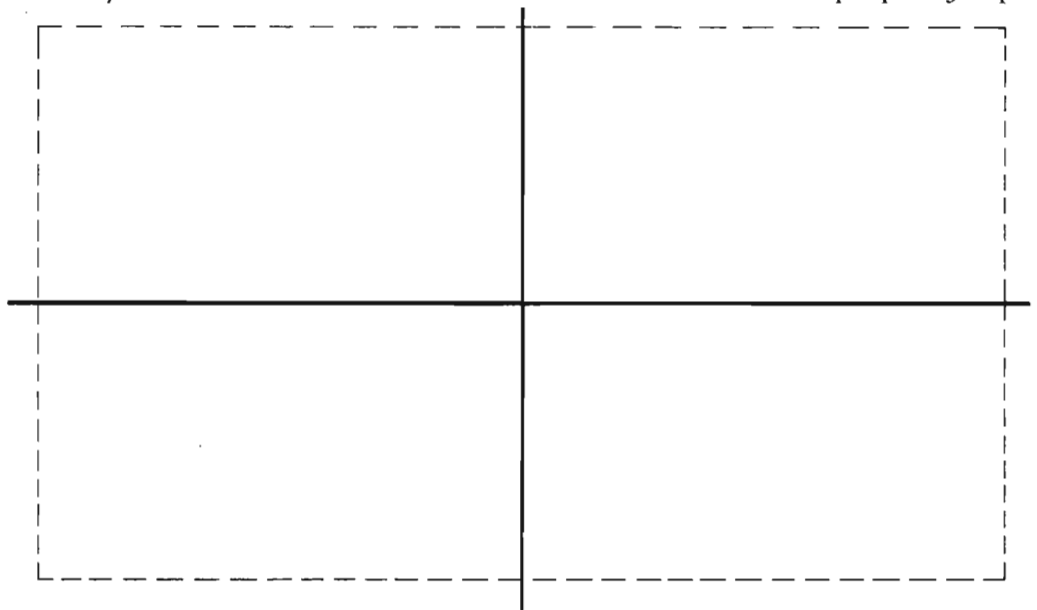
B.		C.	
13	7	20	
		total	

A.	
10	
2	10
B.	
13	7
C.	

Please make up one of your own.

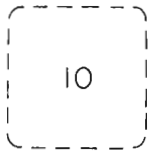
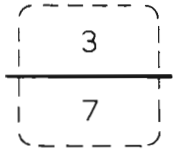
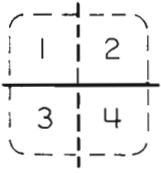
Favor de hacer su propio ejemplo.

D.	

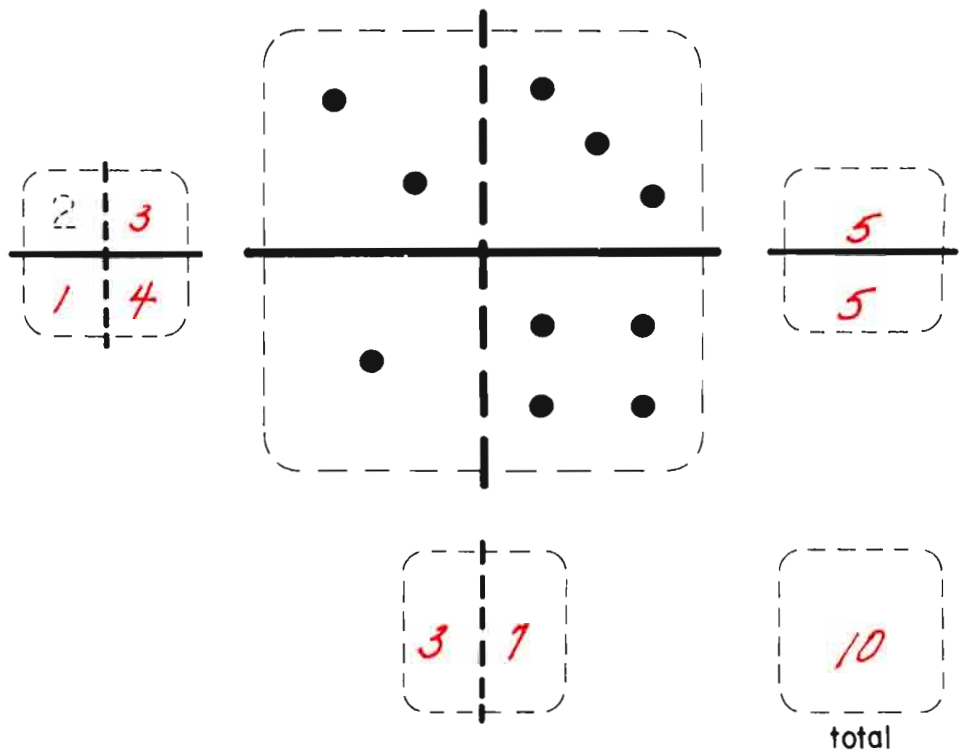
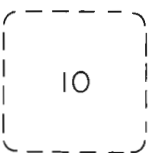
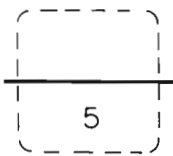
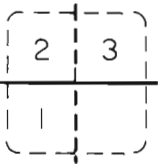
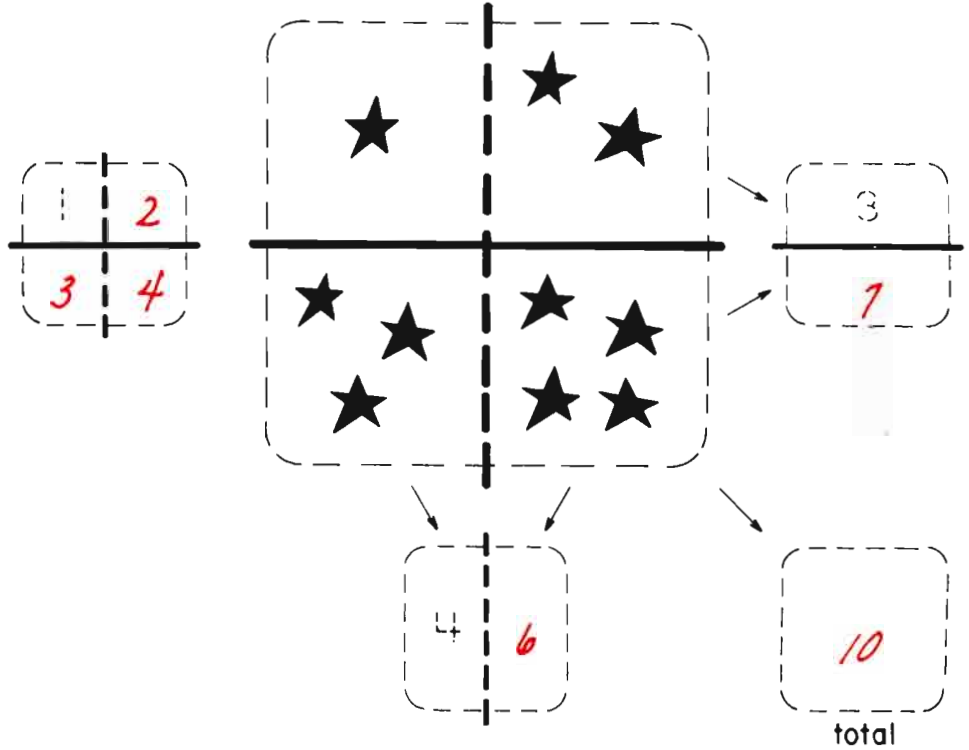


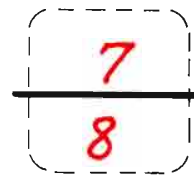
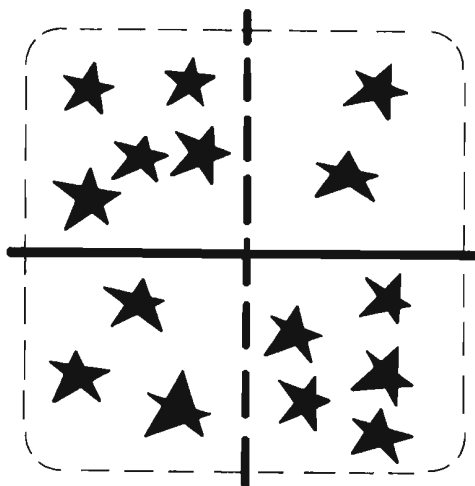
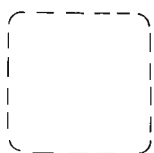
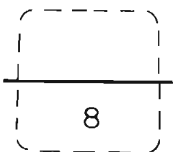
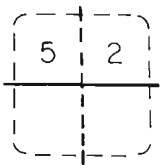
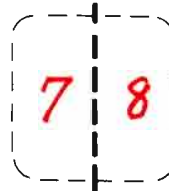
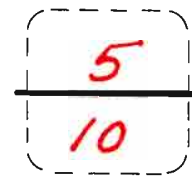
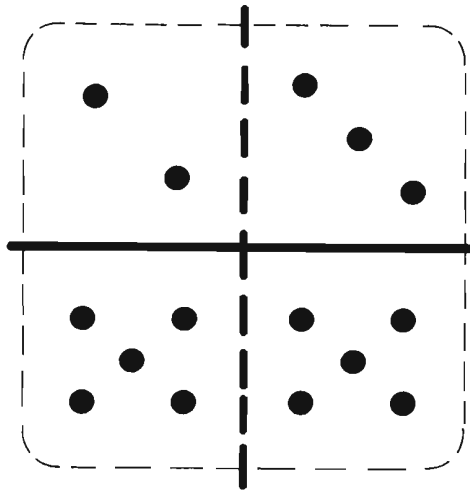
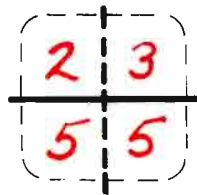
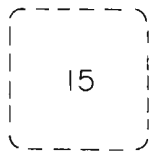
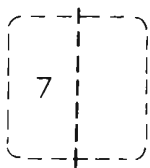
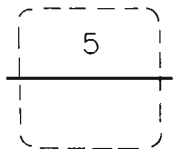
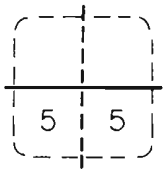
E.	

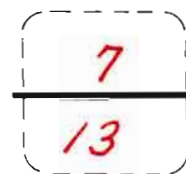
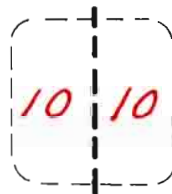
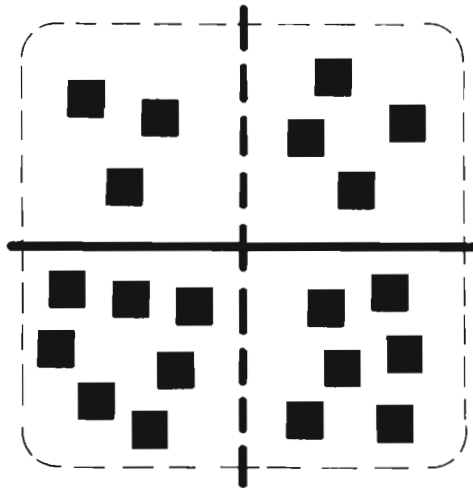
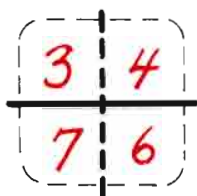
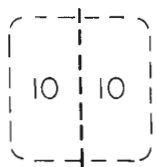
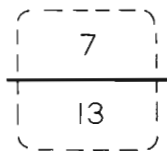
F.	
total	



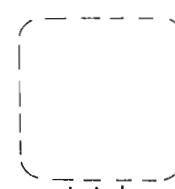
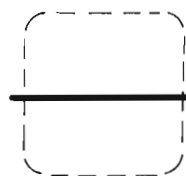
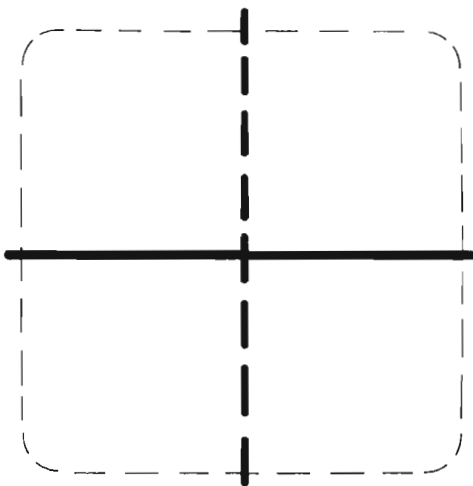
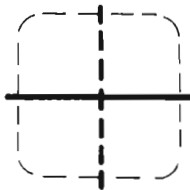
Counters may still be helpful to some youngsters.
See also: D&P pp 85-93, B P/P pp 7-8







Please make up an example of your own.
Favor de hacer su propio ejemplo.

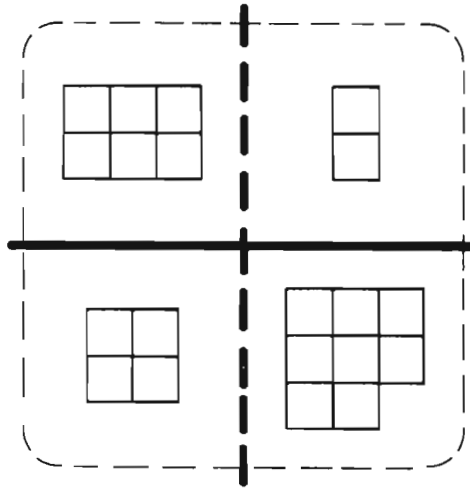


total

6	2
4	8

10	10
----	----

6	2
4	8

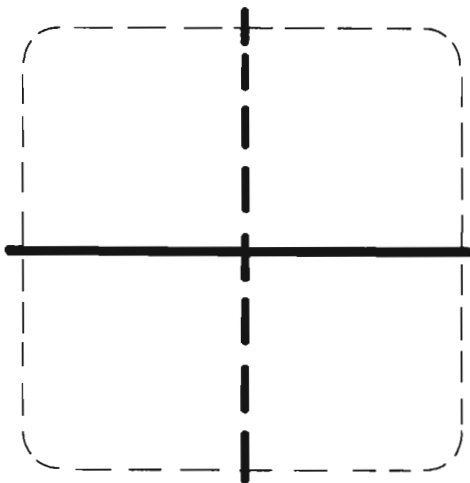


8
12

10	10
----	----

20
total

Please make up an example of your own.
Favor de hacer su propio ejemplo.



total

1	3
2	6

8

9

1	3
2	6

4
8

3	9
---	---

12
total

6

8

4	2
4	2

6
6

8	4
---	---

12
total

5	
5	

12

10

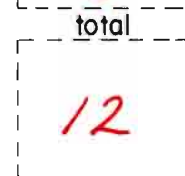
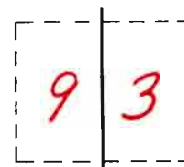
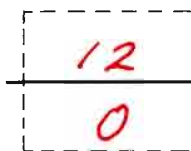
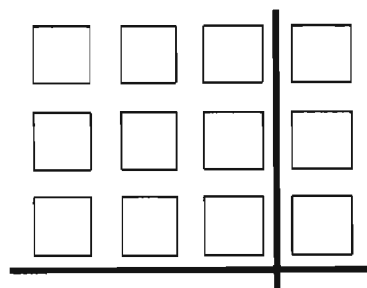
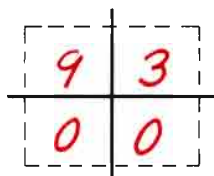
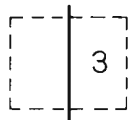
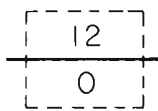
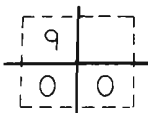
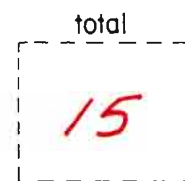
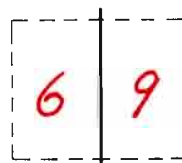
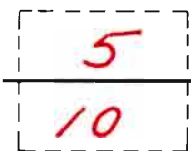
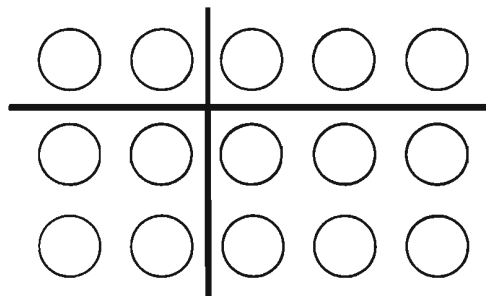
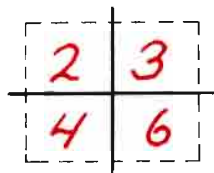
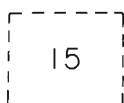
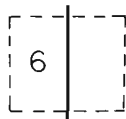
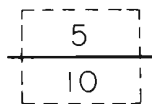
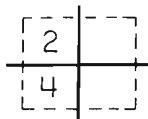
5	7
5	3

☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆
☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆

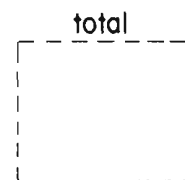
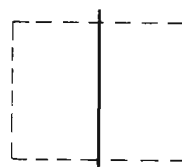
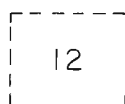
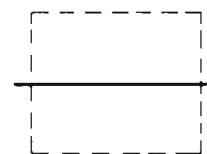
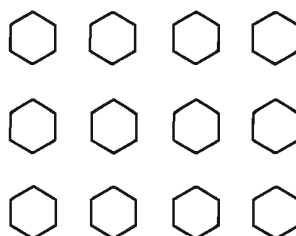
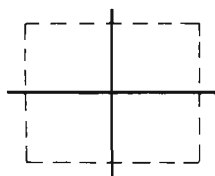
12
8

10	10
----	----

20
total



Please finish this example in your own way.
Favor de terminar este ejemplo en su propia manera.

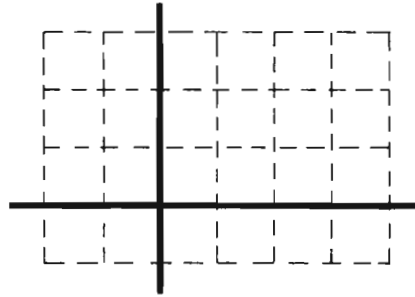


$$\frac{18}{6}$$

$$\frac{\quad}{\quad} 16$$

$$\boxed{24}$$

$$\begin{array}{|c|c|} \hline 6 & 12 \\ \hline 2 & 4 \\ \hline \end{array}$$

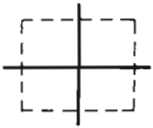


$$\frac{18}{6}$$

total

$$\boxed{24}$$

$$\frac{8}{16}$$

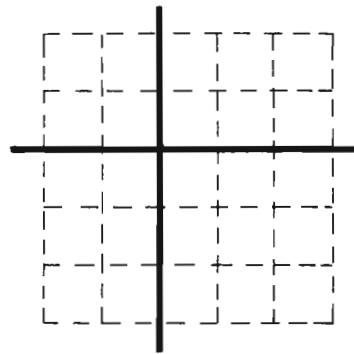


$$\frac{10}{15}$$

$$\frac{\quad}{\quad}$$

$$\boxed{25}$$

$$\begin{array}{|c|c|} \hline 4 & 6 \\ \hline 6 & 9 \\ \hline \end{array}$$



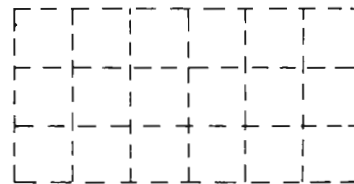
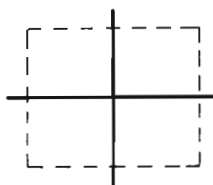
$$\frac{10}{15}$$

total

$$\boxed{25}$$

$$\frac{10}{15}$$

Please complete in your own way.
Favor de completarlo en su propia manera.



$$\frac{\quad}{\quad}$$

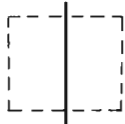
$$\boxed{18}$$

$$\frac{\quad}{\quad}$$

total

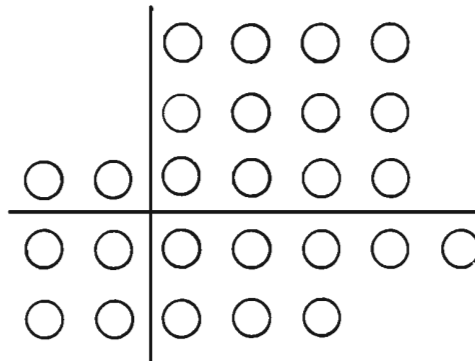
$$\boxed{\quad}$$

$$\begin{array}{|c|} \hline 14 \\ \hline 12 \\ \hline \end{array}$$



$$\boxed{26}$$

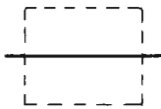
$$\begin{array}{|c|c|} \hline 2 & 12 \\ \hline 4 & 8 \\ \hline \end{array}$$



$$\begin{array}{|c|} \hline 14 \\ \hline 12 \\ \hline \end{array}$$

$$\boxed{6 \quad 20}$$

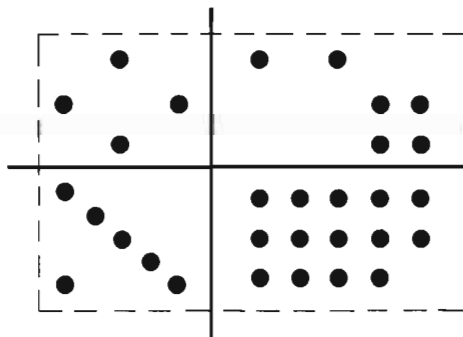
$$\begin{array}{|c|} \hline \text{total} \\ \hline 26 \\ \hline \end{array}$$



$$\begin{array}{|c|c|} \hline 10 & 20 \\ \hline \end{array}$$



$$\begin{array}{|c|c|} \hline 4 & 6 \\ \hline 6 & 14 \\ \hline \end{array}$$



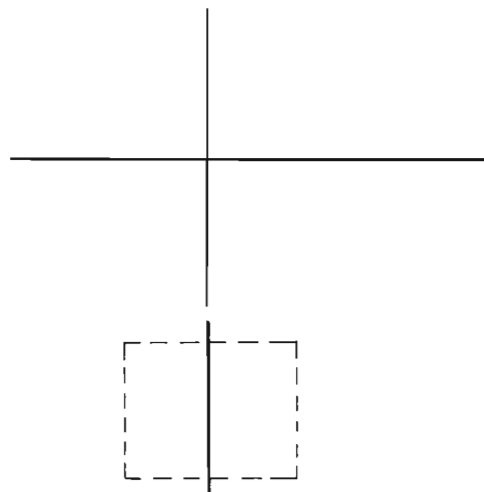
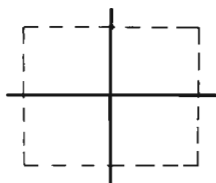
$$\begin{array}{|c|} \hline 10 \\ \hline 20 \\ \hline \end{array}$$

$$\boxed{10 \quad 20}$$

$$\begin{array}{|c|} \hline \text{total} \\ \hline 30 \\ \hline \end{array}$$

Please make up an example of your own.

Favor de hacer su propio ejemplo.



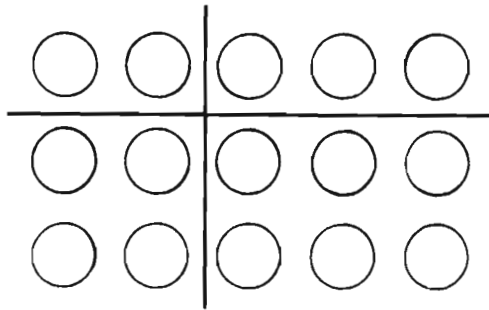
total



On Your Own

Usted Solo

2	3
4	6



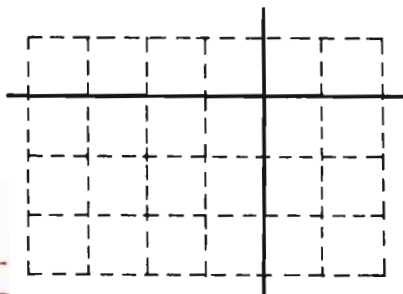
5
10

On the reverse side you will find the first of a series of letters to parents.

6	9
---	---

15
total

4	2
12	6



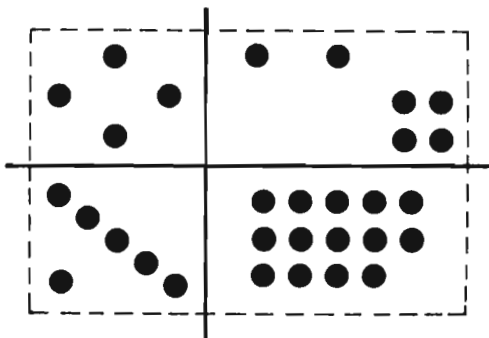
6
18

Periodic progress tests are included as a part of the Individualized Computation program. They are indicated by a face and the words "How do you feel?" in English and Spanish. The child can express his reaction to the check-up by completing the face as happy, sad, angry etc.

16	8
----	---

24
total

4	6
6	14



10
20



How do you feel?
¿Cómo se siente?

10	20
----	----

30
total

Dear Parent,

If your child has completed the "A" level of CDA Individualized Computation you will be familiar with these letters. You will also know that introduction to the four basic processes of addition, subtraction, multiplication and division has been made. Your child has experienced these processes mainly through arranging and rearranging "things" on a page and reporting results in the special shorthand of arithmetic.

A1 and A2 were completely non-verbal. Language is minimized in the remainder of Individualized Computation because it often gets in the way of understanding. As a dividend of this simplicity of language the program has become completely bilingual at the primary level. We believe that you and your child will appreciate this pioneering effort whether your family uses English or Spanish as a first language.

Levels B1 and B2 gradually move to depend more and more on diagrams and sketches - but still with movable counters for those needing them. Since children vary greatly in the age at which they can move comfortably from the "manipulative" to the "representational" level, don't be surprised if your child prefers to continue using counters. We anticipate this and CDA provides many additional resources for valuable math experience in manipulating real objects.

If your child expresses any hesitation about dealing with sketches such as those on the reverse page, you can help by going through the examples using counters. You can also join your child in making up similar problems with either real objects to move around or pictures to count. And every day around home there are lots of simple addition problems that you can share.

Remember, your child is an experienced and competent learner and is simply faced with a temporary problem of not understanding our adult way of writing down arithmetic shorthand. Patience and encouragement on the part of all of us will greatly aid this effort to communicate.

Sincerely,

Please have counters handy.

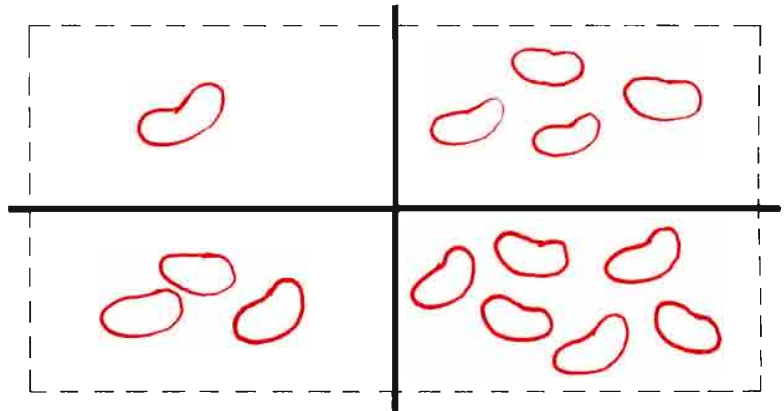
Favor de tener listos los objetos para contar.

5
9

4	10
---	----

14

1	4
3	6



4	10
---	----

5
9

$1 + 4 = \underline{5}$

$3 + 6 = \underline{9}$

$$\begin{array}{r} 1 + 4 = 5 \\ 3 + 6 = 9 \end{array}$$

1
3
4

4
6
10

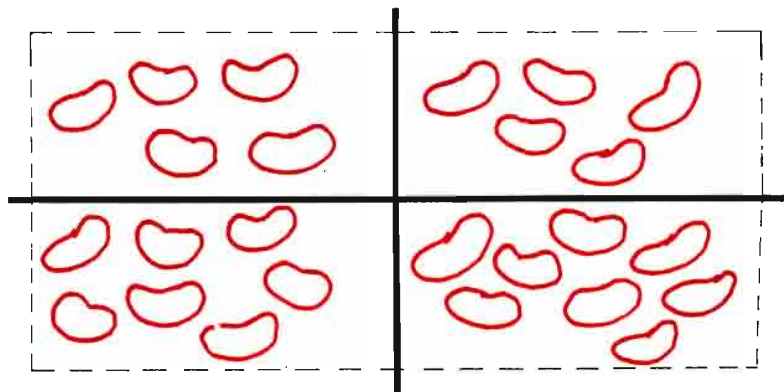
14
total

10
15

12

25

5	5
7	8



12	13
----	----

10
15

$5 + 5 = \underline{10}$

$7 + 8 = \underline{15}$

5
7
12

5
8
13

5
7
12

5
8
13

See also:
D&P pp 95-100
B P/P pp 1-2, 65,
11-12

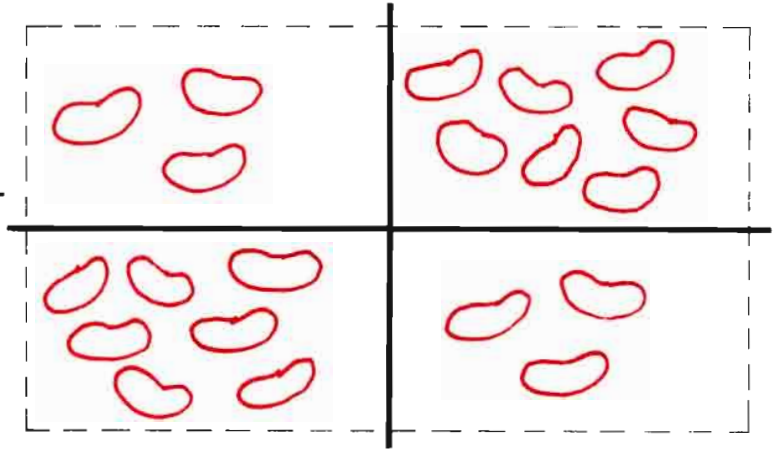
25
total

$$\begin{array}{r} 10 \\ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ \hline \end{array}$$

$$\begin{array}{r|l} 3 & 7 \\ \hline 7 & 3 \end{array}$$



$$\begin{array}{r} 3 \\ + 7 \\ \hline 10 \end{array}$$

$$\begin{array}{r|l} 10 & 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \hline 10 \end{array}$$

$$3 + 7 = 10$$

$$7 + 3 = 10$$

$$7 + 3 = 10$$

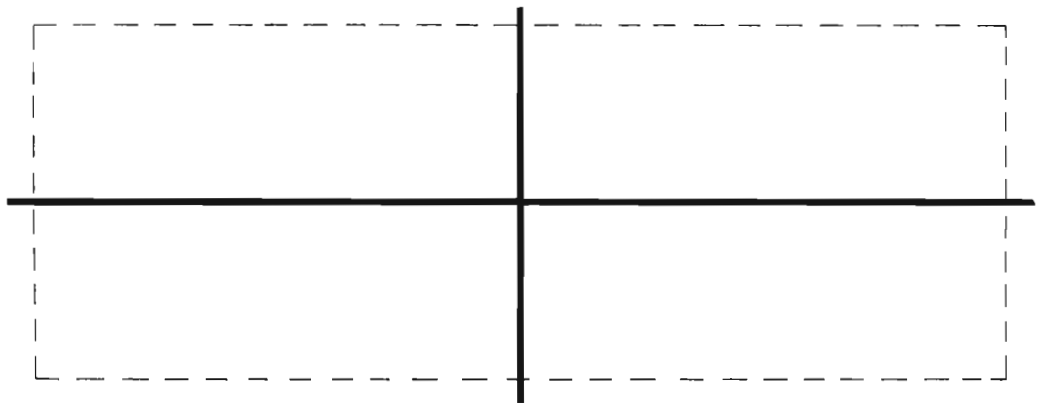
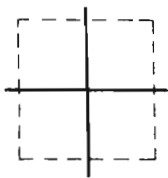
$$\begin{array}{r} 3 \\ + 7 \\ \hline 10 \end{array} \quad \begin{array}{r} 7 \\ + 3 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 20 \\ \hline \end{array}$$

total

Please make up an example of your own.

Favor de hacer su propio ejemplo.



$$\begin{array}{r|l} & \\ \hline & \end{array}$$

$$\begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline + \end{array} = \underline{\quad}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

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

$$\begin{array}{r} \\ \hline \end{array}$$

total

$$\begin{array}{r} 13 \\ 17 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ 15 \\ \hline \end{array}$$

30

$$\begin{array}{r|l} 6 & 7 \\ \hline 9 & 8 \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array}$$

$$\begin{array}{r|l} 15 & 15 \end{array}$$

$$\begin{array}{r} 13 \\ 17 \\ \hline \end{array}$$

$6 + 7 = 13$
 $9 + 8 = 17$

$9 + 8 = 17$

$$\begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 6 \\ + 9 \\ \hline 15 \end{array}$$

total

$$\begin{array}{r} 30 \end{array}$$

Please make up an example of your own.

Favor de hacer su propio ejemplo.

$+$ = $---$
 $+$ = $---$

total

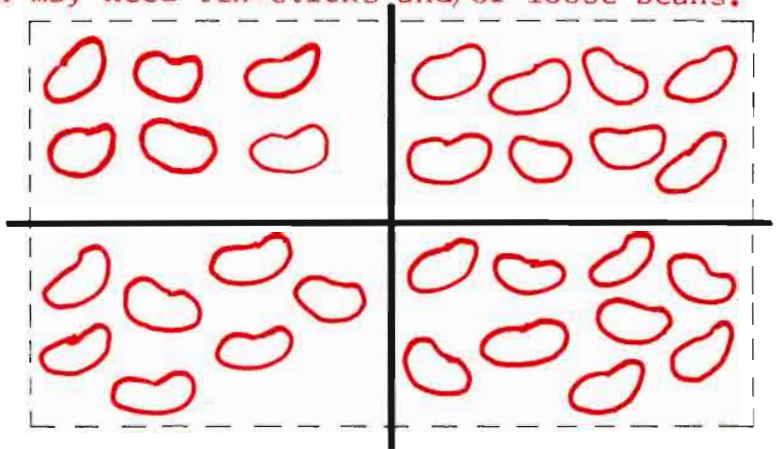
Some children may need ten-sticks and/or loose beans.

$$\begin{array}{|c|} \hline 14 \\ \hline 16 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 13 & 17 \\ \hline \end{array}$$



$$\begin{array}{|c|c|} \hline 6 & 8 \\ \hline 7 & 9 \\ \hline \end{array}$$



$$\begin{array}{|c|} \hline 8 \\ + 9 \\ \hline 17 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 13 & 17 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 14 \\ \hline 16 \\ \hline \end{array}$$

$$\begin{array}{l} 6 + 8 = 14 \\ 7 + 9 = 16 \end{array}$$

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

$$\begin{array}{|c|} \hline 6 \\ + 7 \\ \hline 13 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 8 \\ + 9 \\ \hline 17 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 30 \\ \hline \end{array}$$

total

You may need counters.

Tal vez necesite objetos para contar.

$$\begin{array}{|c|} \hline 1 \\ + 3 \\ \hline 4 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 4 \\ + 6 \\ \hline 10 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 5 \\ + 9 \\ \hline 14 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 5 \\ + 7 \\ \hline 12 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 5 \\ + 8 \\ \hline 13 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 10 \\ + 15 \\ \hline 25 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 3 \\ + 7 \\ \hline 10 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 7 \\ + 3 \\ \hline 10 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 10 \\ + 10 \\ \hline 20 \\ \hline \end{array}$$

$$1 + 4 = 5$$

$$3 + 6 = 9$$

$$4 + 10 = 14$$

$$5 + 5 = 10$$

$$7 + 8 = 15$$

$$12 + 3 = 15$$

$$3 + 7 = 10$$

$$7 + 3 = 10$$

$$10 + 10 = 20$$

$$\begin{array}{|c|} \hline 6 \\ + 9 \\ \hline 15 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 7 \\ + 8 \\ \hline 15 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 13 \\ + 7 \\ \hline 20 \\ \hline \end{array}$$

$$6 + 7 = 13$$

$$9 + 8 = 17$$

$$15 + 15 = 30$$

$$\begin{array}{|c|} \hline 7 \\ + 9 \\ \hline 16 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 6 \\ + 8 \\ \hline 14 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 7 \\ + 13 \\ \hline 20 \end{array}$$

OR

$$\begin{array}{|c|} \hline 7 \\ + 17 \\ \hline 24 \end{array}$$

	$\rightarrow 1 + 3 = 4$
	$\rightarrow 4 + 2 = 6$
\downarrow	\downarrow
$\begin{array}{ c c } \hline 1 & 3 \\ \hline 4 & 2 \\ \hline \end{array}$	$\begin{array}{ c } \hline 4 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\rightarrow 5 + 5 = 10$

Please add any missing dots.

	\rightarrow	$\begin{array}{r} 1 + 3 = 4 \\ \hline \end{array}$
	\rightarrow	$\begin{array}{r} 4 + 2 = 6 \\ \hline \end{array}$
\downarrow	\downarrow	\downarrow
$\begin{array}{ c c } \hline 1 & 3 \\ \hline 4 & 2 \\ \hline \end{array}$	$\begin{array}{ c } \hline 4 \\ \hline \end{array}$	$\begin{array}{ c } \hline 4 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\rightarrow 5 + 5 = 10$

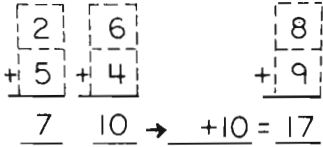
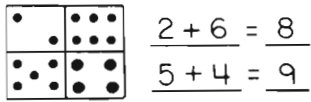
Favor de agregar los puntos que faltan.

	$\begin{array}{r} 4 + 5 = 9 \\ \hline \end{array}$
	$\begin{array}{r} 3 + 1 = 4 \\ \hline \end{array}$
\downarrow	\downarrow
$\begin{array}{ c c } \hline 5 & 4 \\ \hline 3 & 1 \\ \hline \end{array}$	$\begin{array}{ c } \hline 4 \\ \hline \end{array}$
$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$	$\rightarrow 7 + 6 = 13$

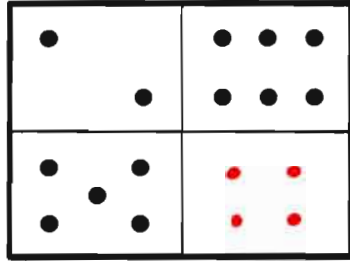
	$\begin{array}{r} 4 + 5 = 9 \\ \hline \end{array}$
	$\begin{array}{r} 3 + 1 = 4 \\ \hline \end{array}$
\downarrow	\downarrow
$\begin{array}{ c c } \hline 4 & 5 \\ \hline 3 & 1 \\ \hline \end{array}$	$\begin{array}{ c } \hline 9 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$	$\rightarrow 7 + 6 = 13$

	$\begin{array}{r} 5 + 5 = 10 \\ \hline \end{array}$
	$\begin{array}{r} 2 + 3 = 5 \\ \hline \end{array}$
\downarrow	\downarrow
$\begin{array}{ c c } \hline 5 & 5 \\ \hline 2 & 3 \\ \hline \end{array}$	$\begin{array}{ c } \hline 10 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$	$\rightarrow 7 + 8 = 15$

	$\begin{array}{r} 5 + 5 = 10 \\ \hline \end{array}$
	$\begin{array}{r} 2 + 3 = 5 \\ \hline \end{array}$
\downarrow	\downarrow
$\begin{array}{ c c } \hline 5 & 5 \\ \hline 2 & 3 \\ \hline \end{array}$	$\begin{array}{ c } \hline 10 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$	$\rightarrow 7 + 8 = 15$

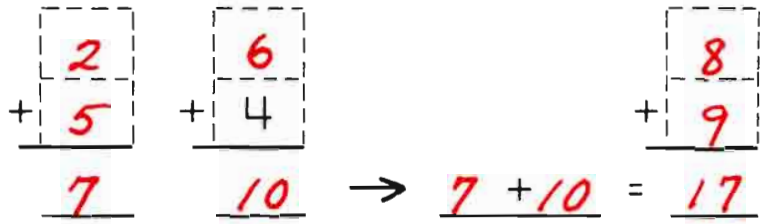


Please add any missing dots.

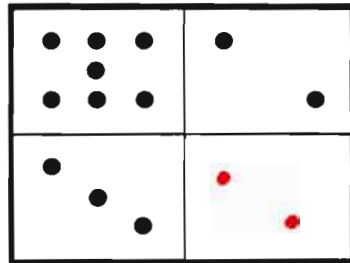
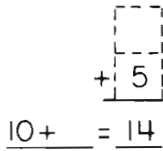
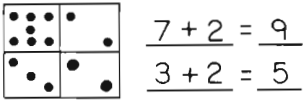


$$2 + 6 = 8$$

$$5 + 4 = 9$$

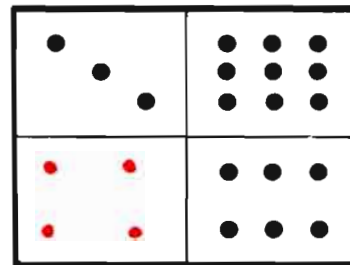
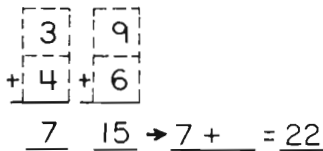
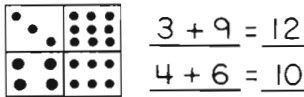
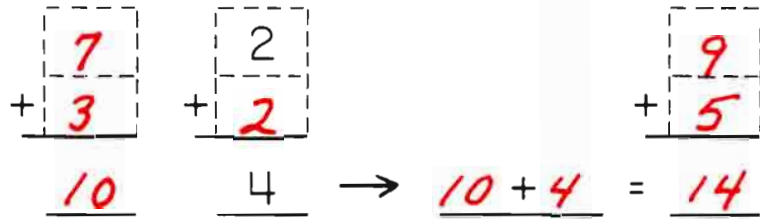


Favor de agregar los puntos que faltan.



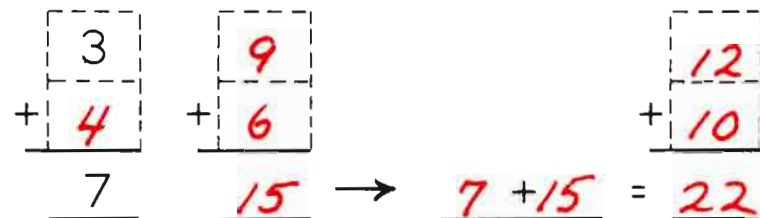
$$7 + 2 = 9$$

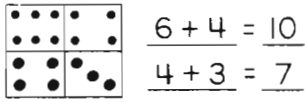
$$3 + 2 = 5$$



$$3 + 9 = 12$$

$$4 + 6 = 10$$



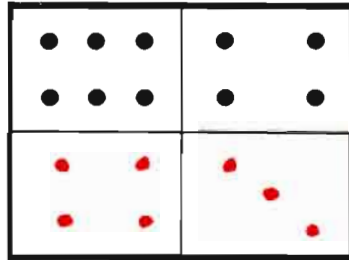


$$6 + 4 = 10$$

$$4 + 3 = 7$$

$$\begin{array}{r} 10 \\ + \\ 7 \\ \hline 17 \end{array}$$

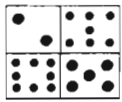
Please add any missing dots.



$$6 + 4 = 10$$

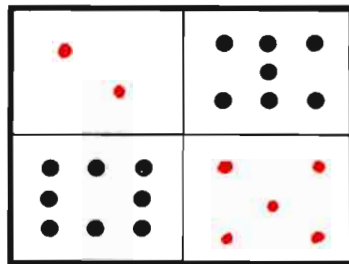
$$4 + 3 = 7$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline 10 \end{array} \quad \begin{array}{r} 4 \\ + 3 \\ \hline 7 \end{array} \quad \begin{array}{r} 10 \\ + 7 \\ \hline 17 \end{array}$$



$$\begin{array}{r} 8 \\ + \\ 10 \\ \hline 18 \end{array} \quad \begin{array}{r} 7 \\ + \\ 13 \\ \hline 20 \end{array} \quad \begin{array}{r} 10 \\ + 12 \\ \hline 22 \end{array}$$

Favor de agregar los puntos que faltan.



$$2 + 7 = 9$$

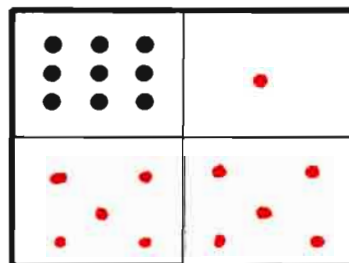
$$8 + 5 = 13$$

$$\begin{array}{r} 2 \\ + 8 \\ \hline 10 \end{array} \quad \begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array} \quad \begin{array}{r} 9 \\ + 13 \\ \hline 22 \end{array}$$

$$9 + 1 = 10$$

$$5 + 5 = 10$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline 14 \end{array} \quad \begin{array}{r} 1 \\ + \\ 6 \\ \hline 7 \end{array} \quad \begin{array}{r} 10 \\ + \\ 10 \\ \hline 20 \end{array}$$



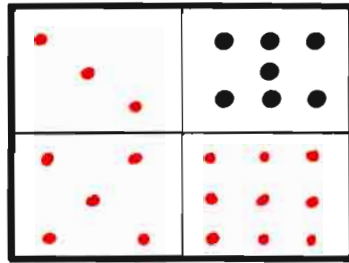
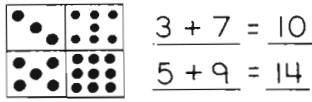
$$9 + 1 = 10$$

$$5 + 5 = 10$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline 14 \end{array} \quad \begin{array}{r} 1 \\ + 5 \\ \hline 6 \end{array} \quad \begin{array}{r} 10 \\ + 10 \\ \hline 20 \end{array}$$

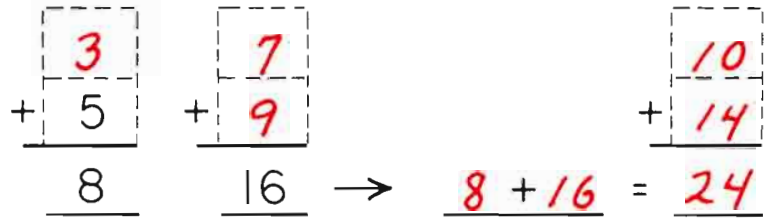
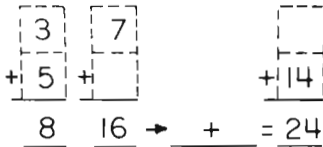
Please add any missing dots.

Favor de agregar los puntos que faltan.



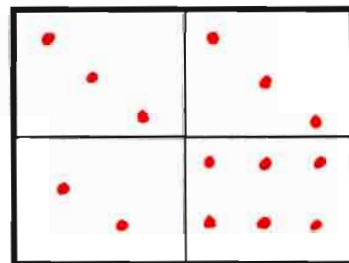
$$\underline{3} + \underline{7} = \underline{10}$$

$$\underline{5} + \underline{9} = \underline{14}$$



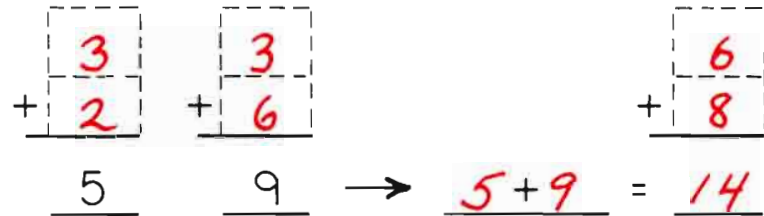
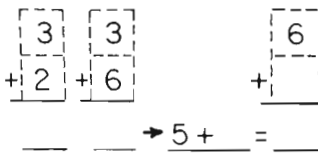
$$\underline{3} + \underline{3} = \underline{6}$$

$$\underline{2} + \underline{6} = \underline{8}$$



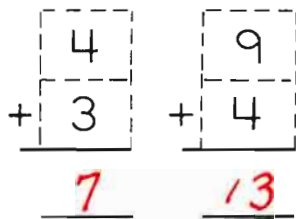
$$\underline{3} + \underline{3} = \underline{6}$$

$$\underline{2} + \underline{6} = \underline{8}$$



You may need counters.

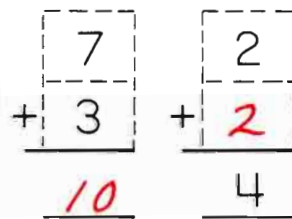
Tal vez necesite objetos para contar.



$$\underline{5} + \underline{5} = \underline{10}$$

$$\underline{7} + \underline{6} = \underline{13}$$

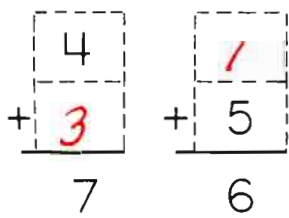
$$\underline{4} + \underline{5} = \underline{9}$$



$$\underline{5} + \underline{4} = \underline{9}$$

$$\underline{3} + \underline{2} = \underline{5}$$

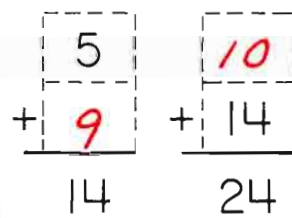
$$\underline{4} + \underline{6} = \underline{10}$$



$$\underline{9} + \underline{5} = \underline{14}$$

$$\underline{2} + \underline{7} = \underline{9}$$

$$\underline{5} + \underline{5} = \underline{10}$$

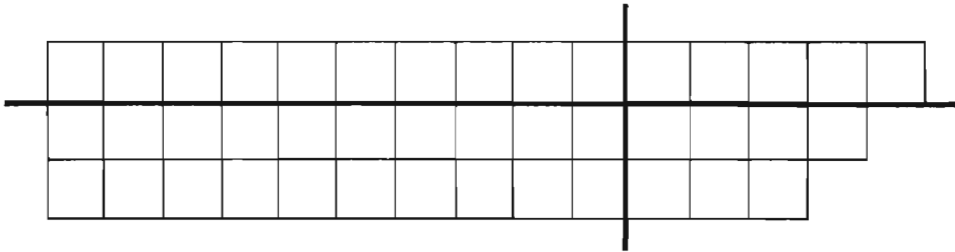


$$\underline{3} + \underline{5} = \underline{8}$$

$$\underline{7} + \underline{9} = \underline{16}$$

$$\underline{3} + \underline{7} = \underline{10}$$

On Your Own
Usted Solo



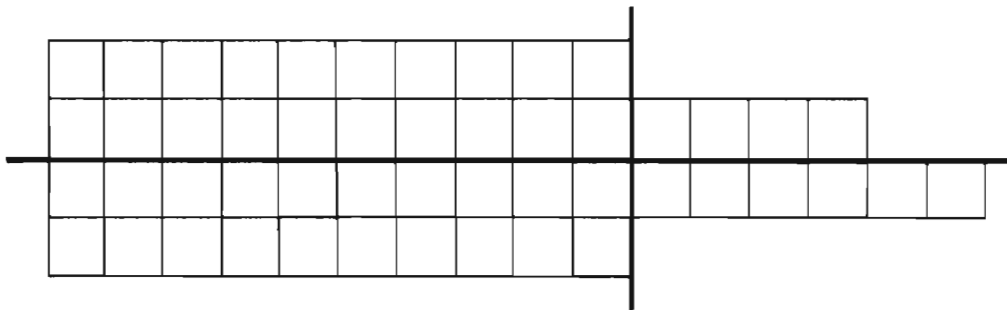
10	5	15
20	7	27
30	12	42

10	5
20	7

30	12
----	----

15
27

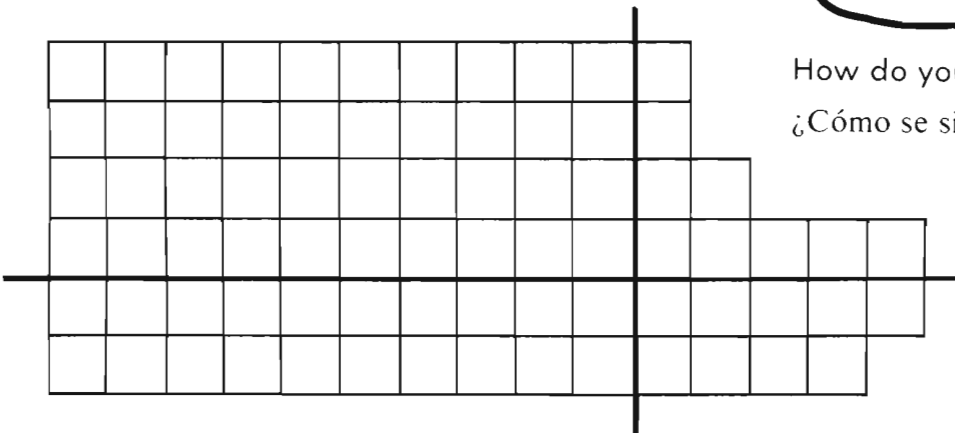
42



20	4	24
20	6	26
40	10	50



How do you feel?
¿Cómo se siente?



40	9	49
20	9	29
60	18	78

Dear Parent,

In recent days your child has been developing increasing skill in solving arithmetic problems that add in two directions. We have also presented the problem of finding a solution by filling in missing dots on dominoes.

You might enjoy joining in some problem making and solving of the sort shown on the other side - don't hesitate to use counters if it feels more comfortable to your child. This step with diagrams is often difficult for a child. It becomes much more obvious with counters.

You will notice that we have been using a lot of boxes of various sizes placed in different positions on the page. These boxes are an important part of an orderly move from dealing with "things" that can be moved around experimentally to handling pictures of "things." Finally, we'll deal just with abstract numbers to represent the real objects and pictures. Your child already knows a great deal of arithmetic. This process of adding across and up and down will finally lead to skill in communicating this knowledge.

Dominoes (with numbers up to 6) is a beneficial and fun game for children at this point. And any kitchen game where you can say "How many more do we need?" makes the whole process become more meaningful.

An old CDA adage might be worth mentioning at this point. "When in doubt, count. When not in doubt, don't count." As children get weary of the tiresome process of one-to-one counting they will begin looking for shortcuts. That's what arithmetic is really all about. If we tune in and really listen we'll jointly discover the right time to offer help with shortcuts.

To be more specific: if you sense that your child is getting tired of counting 6 beans and 4 beans to find 10 then maybe a good time has arrived to start testing each other on some simple addition combinations. But don't rush it. Better to wait for a clear call for help than to push a child too fast. Every child operates at an individual pace, and knows that pace better than you or I.

Sincerely,

All together and "IN and OUT "

Todos juntos y "DENTRO y AFUERA"

A.

10
5
5

B.

12
7

A.

10 all

5 in

5 out

B.

12 todos

7 dentro

5 afuera

C.

10
4

D.

3
9

C.

10

6

4

D.

12

3

9

E.

6

F.

6

E.

10

4

6

F.

12

6

6

All together and "IN and OUT."

Todos juntos y "DENTRO y AFUERA"

A.

6
6
0

B.

14
6
10

A.

all

8
4
0

in

out

B.

todos

14
4
10

dentro

afuera

C.

6
2

D.

12
6

C.

8

8
4
2

6

2

D.

12

12
6
6

6

6

E.

10
6
4

F.

6

E.

10

10
4
6

6

4

F.

10

10
4
6

4

6

All together and "IN and OUT."

Todos juntos y "DENTRO y AFUERA"

A.

12
4
8

B.

12
8

A.

12
4
8

in

out

B.

12
8
4

todos

dentro

afuera

C.

9
5 6

D.

15
6

C.

15
9
6

D.

15
6
9

E.

5

F.

7

E.

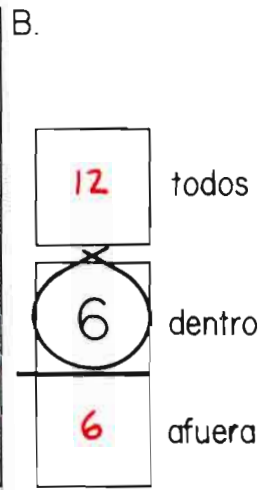
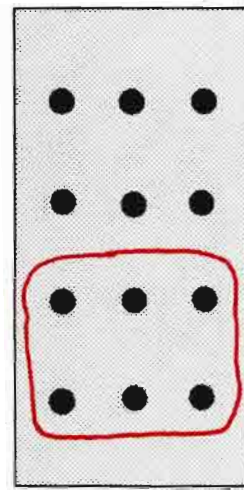
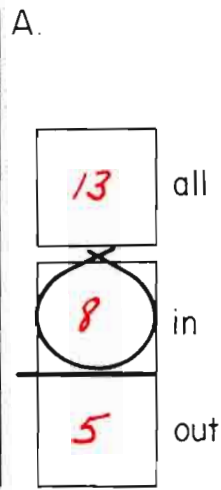
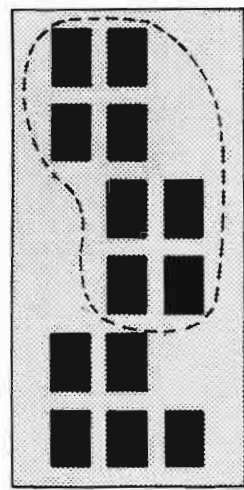
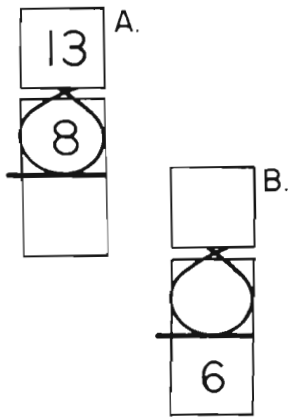
14
5
9

F.

12
7
5

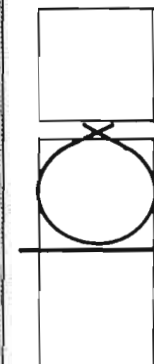
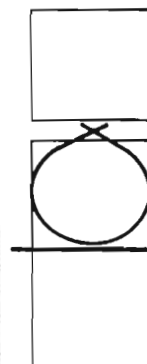
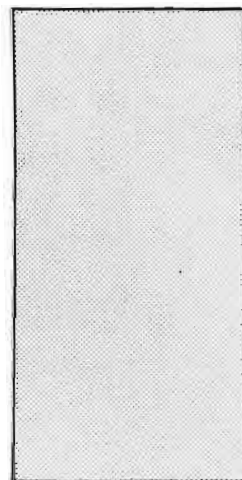
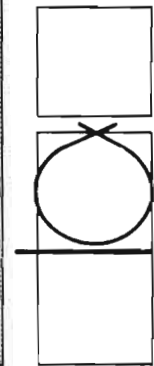
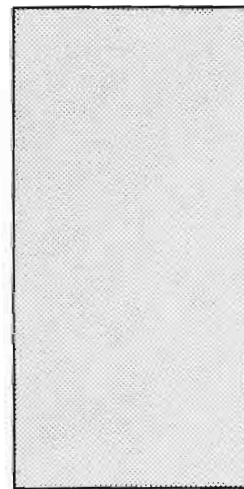
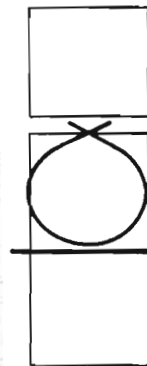
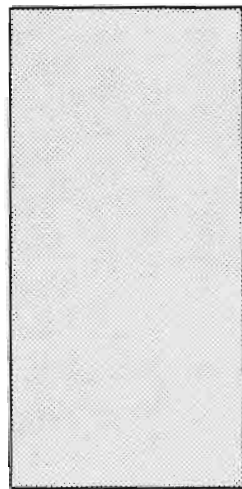
All together and "IN and OUT "

Todos juntos y "DENTRO y AFUERA"

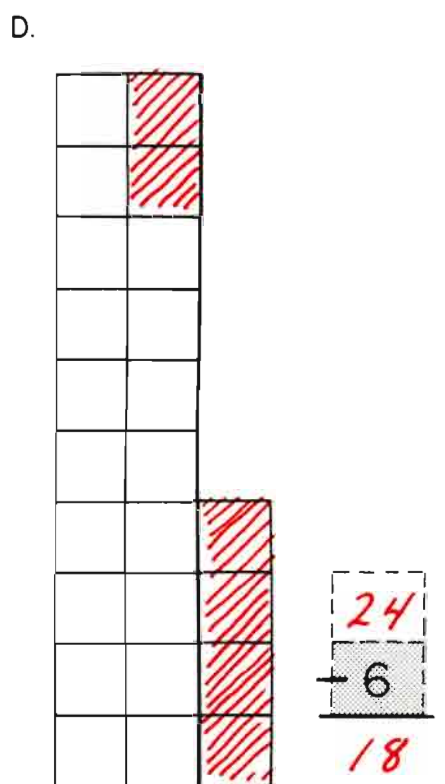
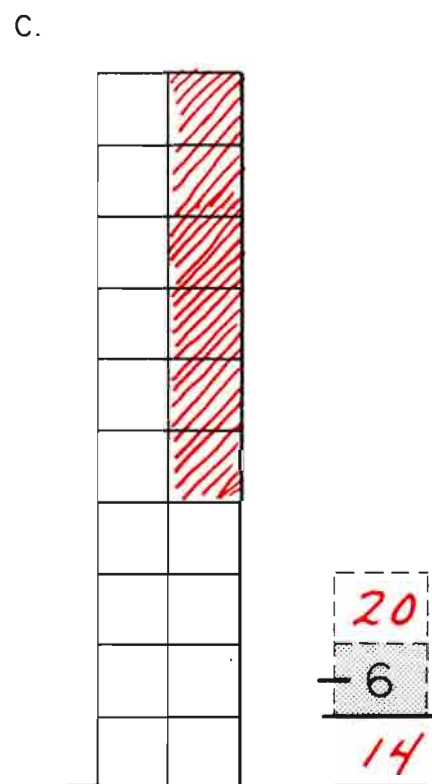
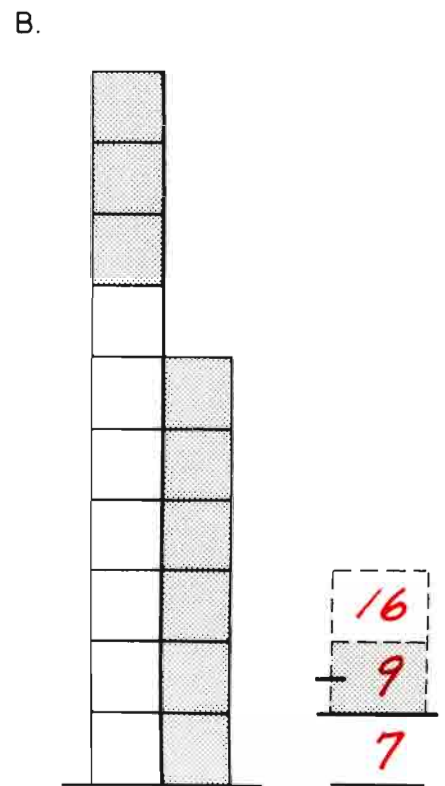
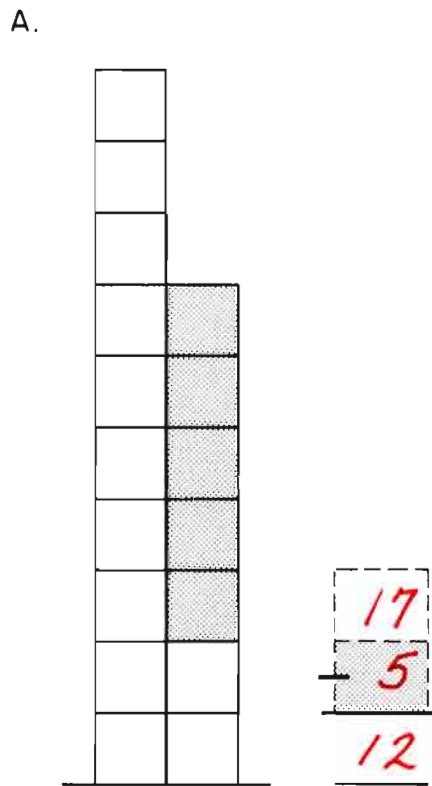
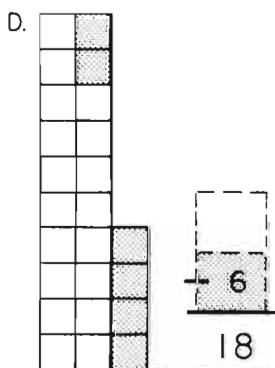
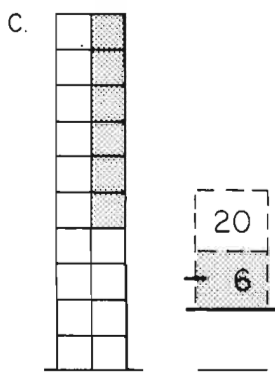
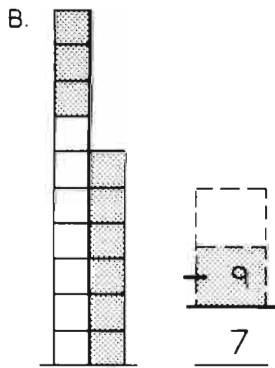
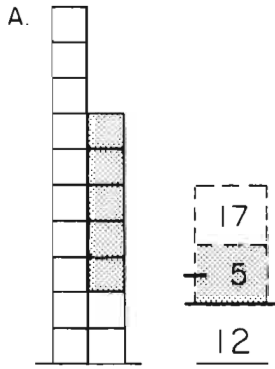


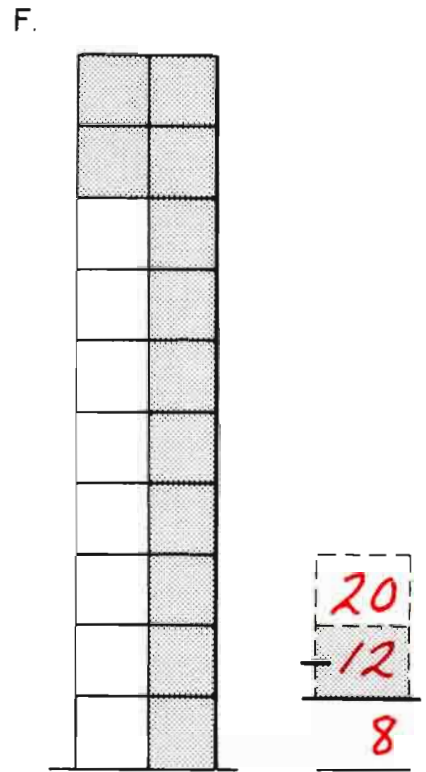
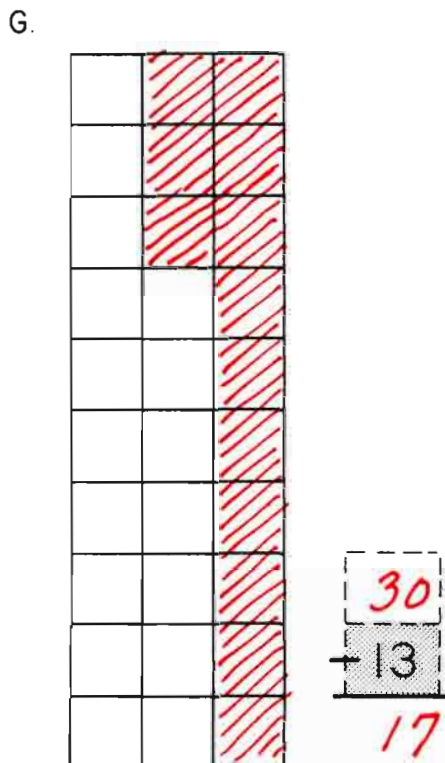
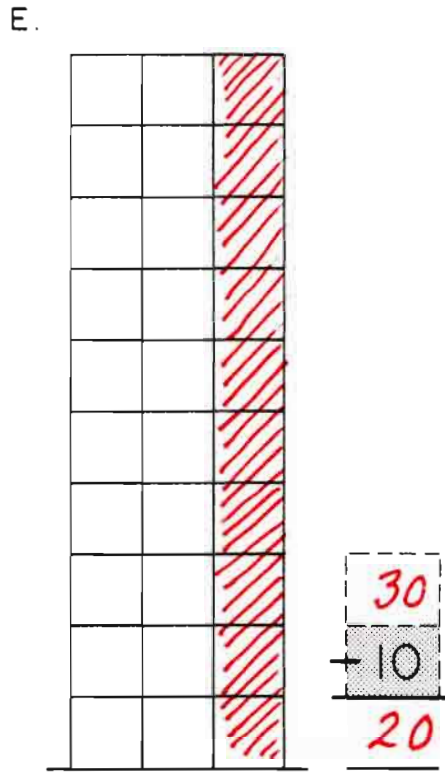
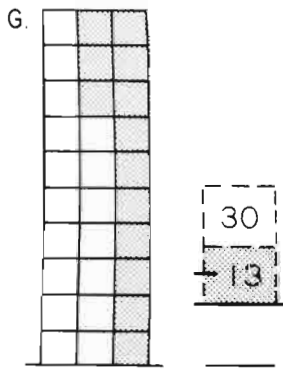
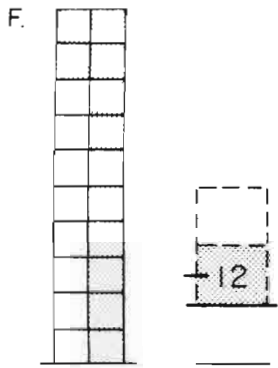
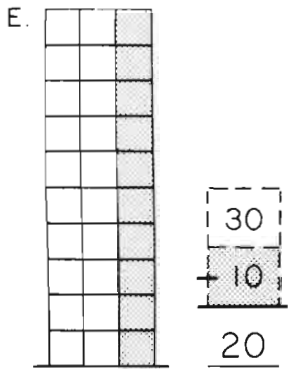
Please make up your own examples.

Favor de hacer ejemplos suyos.

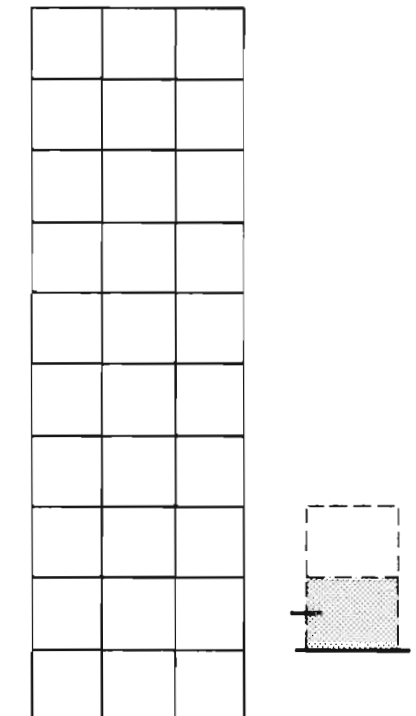


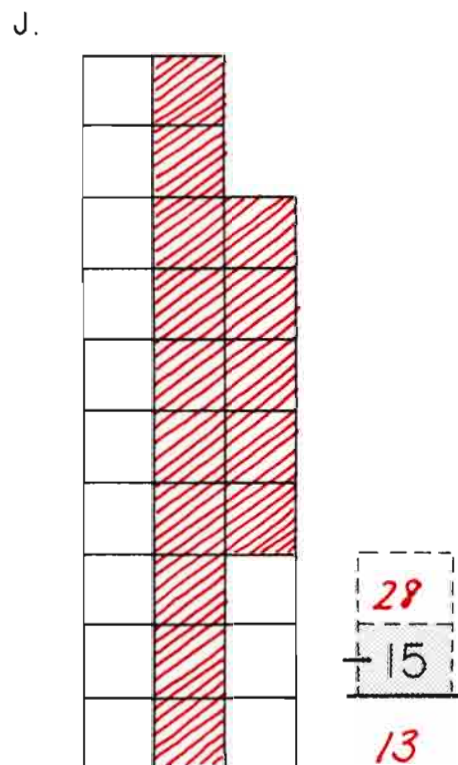
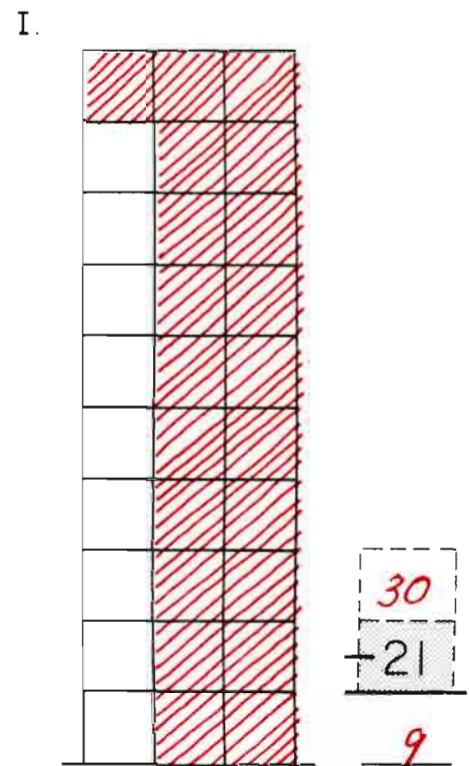
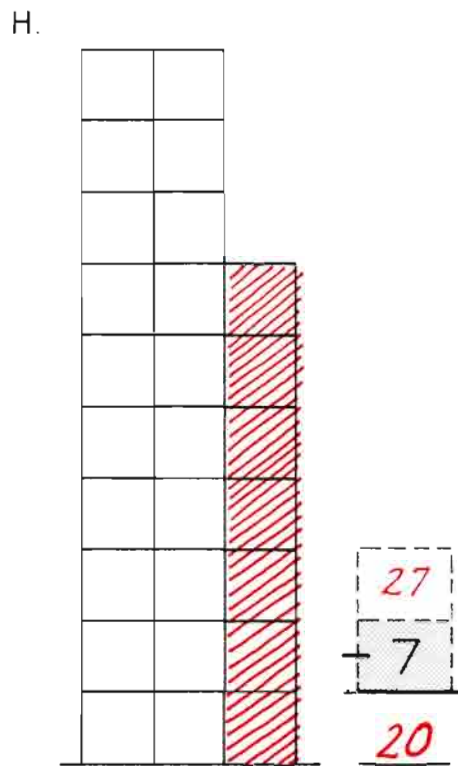
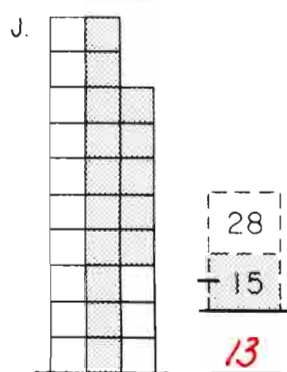
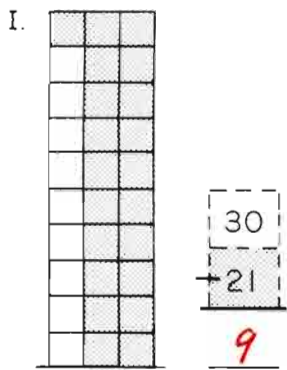
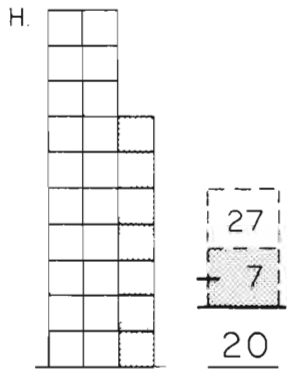
You may want to have the children shade in squares to be subtracted.
See also: D.I. pp 92-96, 98-100



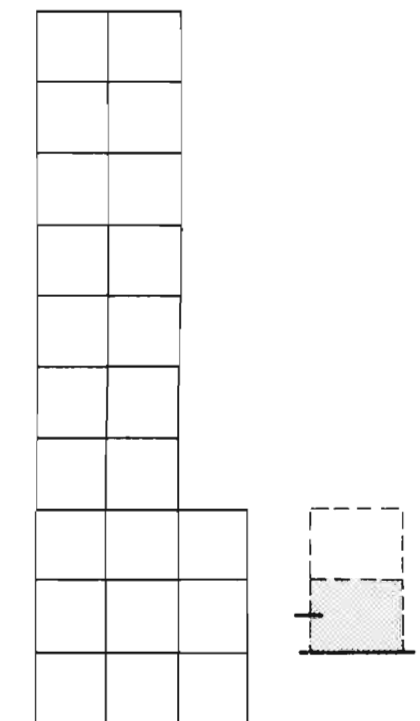


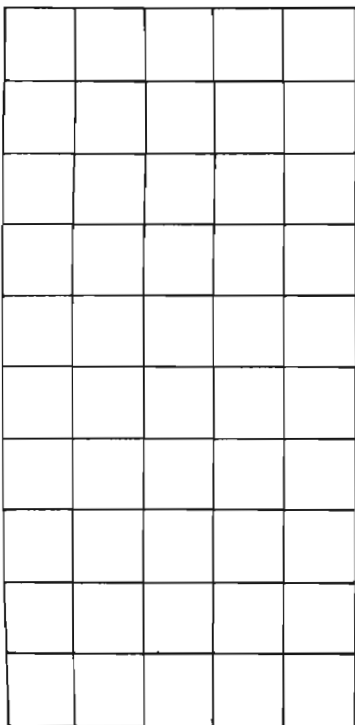
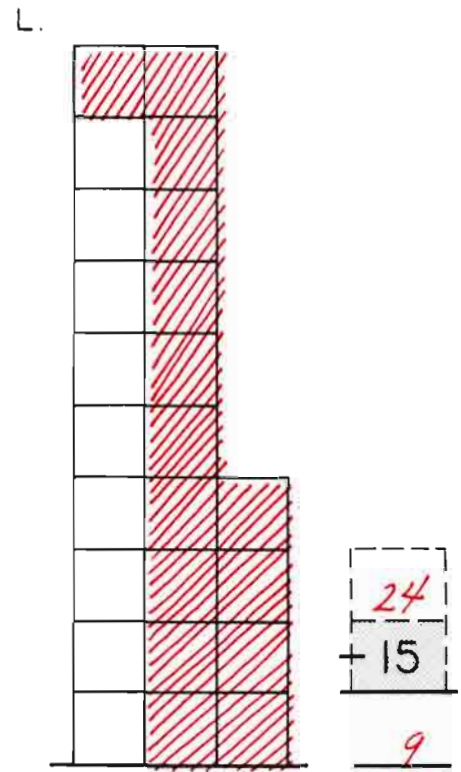
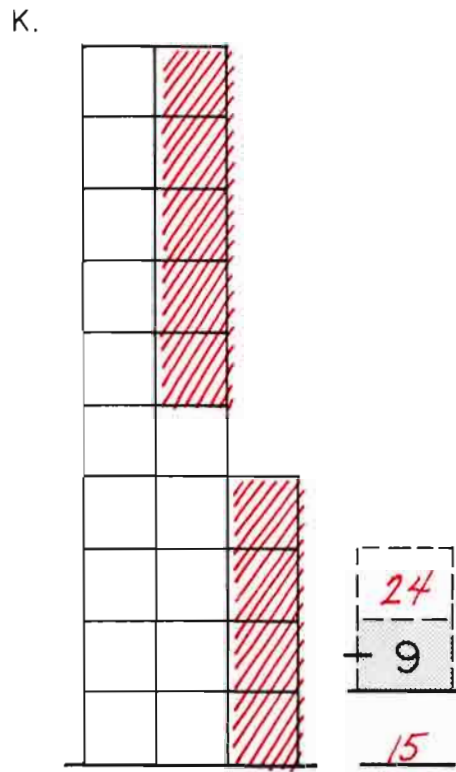
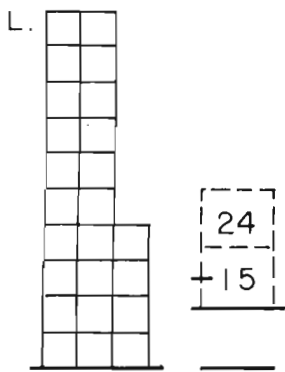
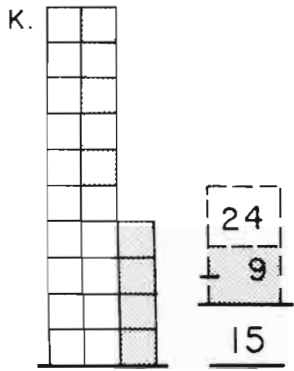
Please make up your own.
Favor de hacer uno suyo.





Please make up your own.
Favor de hacer uno suyo.





$$\begin{array}{r} 17 \\ - 5 \\ \hline \end{array}$$

12

$$\begin{array}{r} 16 \\ - 9 \\ \hline \end{array}$$

7

$$\begin{array}{r} 20 \\ - 6 \\ \hline \end{array}$$

14

$$\begin{array}{r} 24 \\ - 6 \\ \hline \end{array}$$

18

$$\begin{array}{r} 30 \\ - 10 \\ \hline \end{array}$$

20

$$\begin{array}{r} 20 \\ - 12 \\ \hline \end{array}$$

8

$$\begin{array}{r} 30 \\ - 13 \\ \hline \end{array}$$

17

$$\begin{array}{r} 24 \\ - 9 \\ \hline \end{array}$$

15

$$\begin{array}{r} 50 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ - 7 \\ \hline \end{array}$$

20

$$\begin{array}{r} 30 \\ - 21 \\ \hline \end{array}$$

9

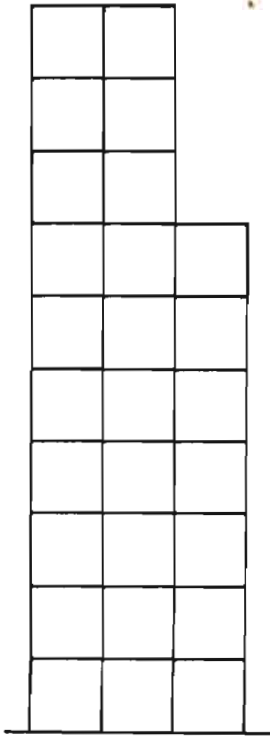
$$\begin{array}{r} 28 \\ - 15 \\ \hline \end{array}$$

13

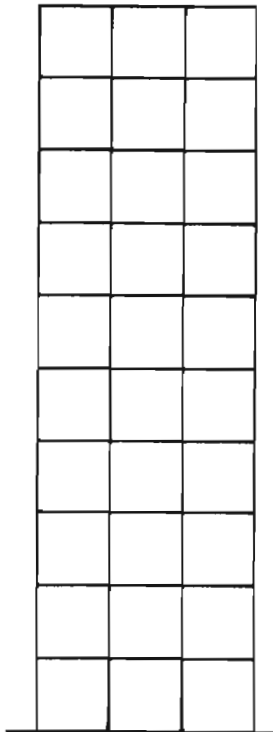
$$\begin{array}{r} 24 \\ - 15 \\ \hline \end{array}$$

9

On Your Own
Usted Solo



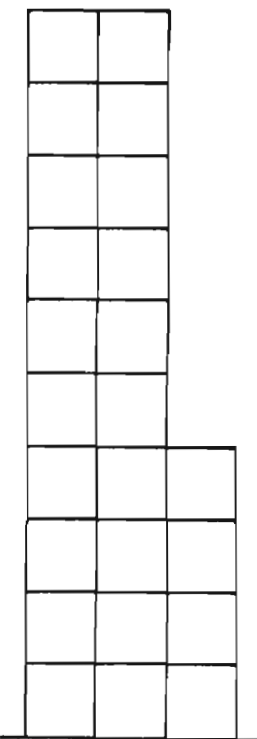
$$\begin{array}{r} 27 \\ - 7 \\ \hline 20 \end{array}$$



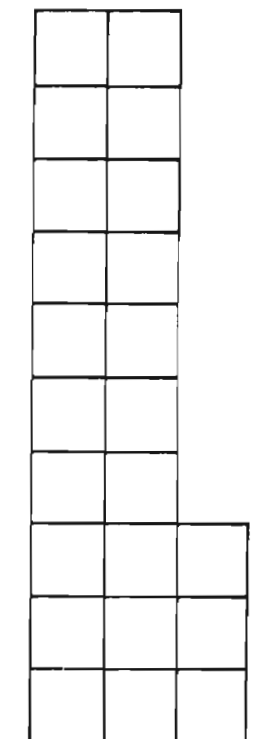
$$\begin{array}{r} 30 \\ - 21 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 27 \\ - 5 \\ \hline 22 \end{array}$$

$$\begin{array}{r} 30 \\ - 10 \\ \hline 20 \end{array}$$



$$\begin{array}{r} 24 \\ - 15 \\ \hline 9 \end{array}$$



$$\begin{array}{r} 23 \\ - 9 \\ \hline 14 \end{array}$$



How do you feel?
¿Cómo se siente?

$$\begin{array}{r} 23 \\ - 3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 30 \\ - 5 \\ \hline 25 \end{array}$$

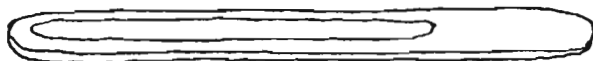
$$\begin{array}{r} 24 \\ - 10 \\ \hline 14 \end{array}$$

Dear Parent,

Both subtraction and "tens" are now getting the attention of your child. Although we are continuing to move toward the use of pictures and diagrams in place of manipulating real "things," some children may still be more comfortable with counters and even with one-to-one counting.

Its likely that sometime this year your child is going to begin to look for groups of real objects or pictures of groups that make ten - because ten is generally a better place than "one" from which to start counting. At school we find ten-sticks and loose beans very useful for games that develop this concept of "ten."

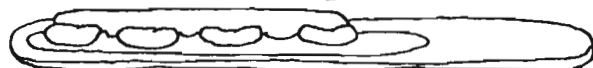
If you and your child would like to make some beansticks you might find the suggestions below helpful. You'll need popsicle sticks or tongue depressors, red beans (or any large beans), and white glue.



1. Run a line of white glue on the stick long enough for the number of beans you're going to use.

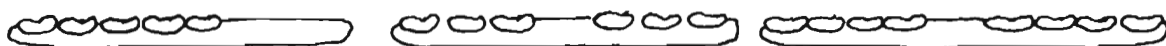


2. Place the beans on the glue.



3. Run another line of glue over the beans. This will disappear. Leave the sticks to dry overnight.

Its a good idea to group beans on the sticks so the child can see number combinations more clearly -



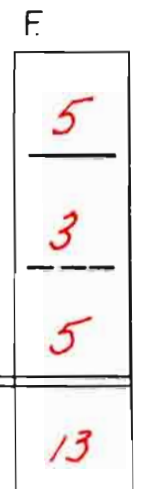
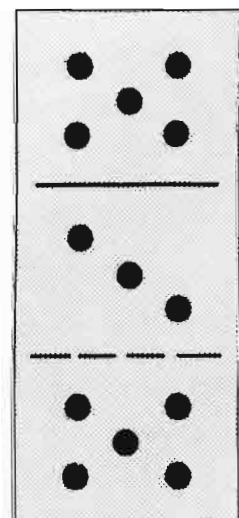
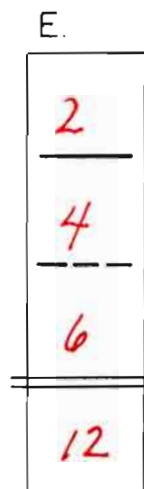
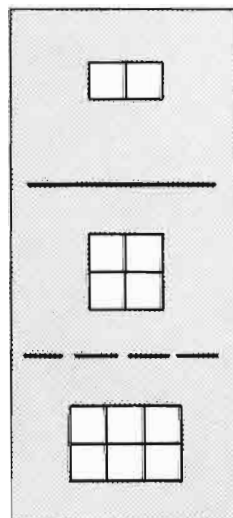
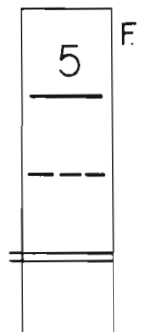
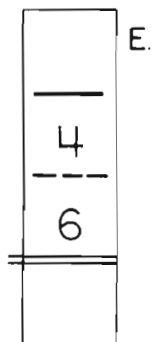
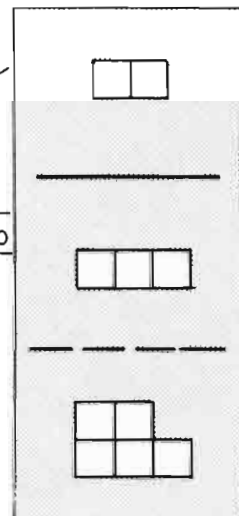
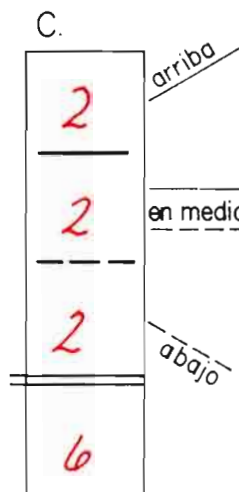
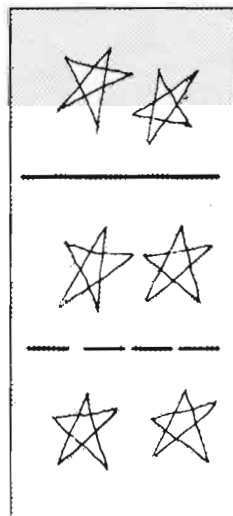
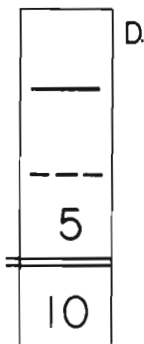
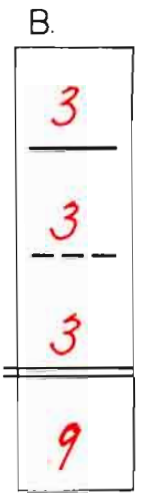
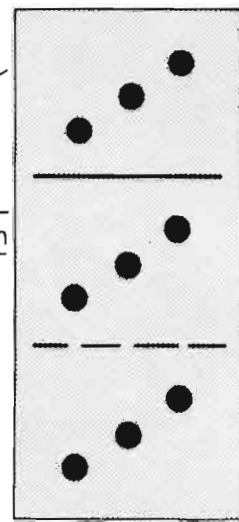
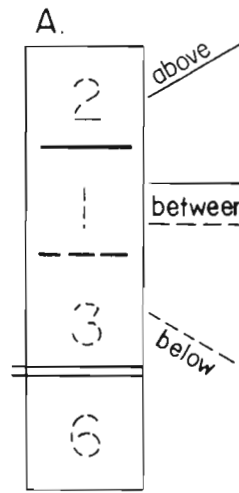
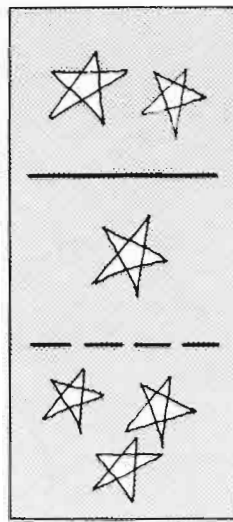
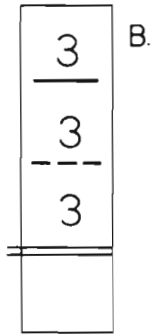
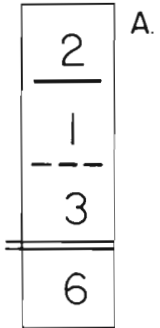
Your child will need a set of beansticks with 1 to 10 beans (ten-sticks.) You will also want an extra set of ones, twos, threes, fours, etc. A small bag of loose beans to keep with the sticks is also helpful. Many children like to make their own sets and even little ones can make them easily. It's fun!

Sincerely,

ABOVE.....BĒLOW.....and BĒWEEN

ARRIBA.....ĀBĀJO.....y

ĒN MEDIĒO



ABOVE.....BĒLOW.....and BĒWEEN

ARRIBA.....ĀBĀJŌ.....y ĒN MEDĪŌ

A.

3
7
5
15

B.

4
4
4

C.

5
16

D.

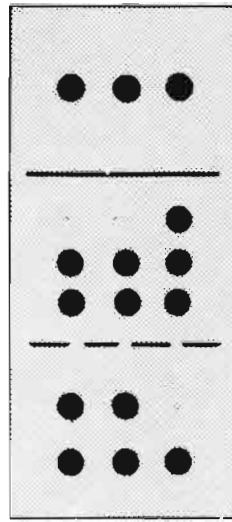
2
9

E.

1
8

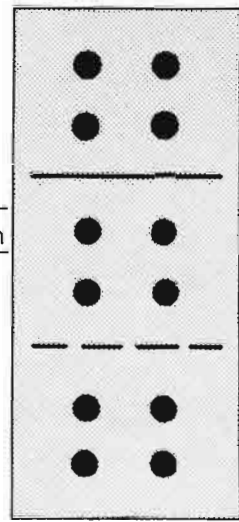
F.

12



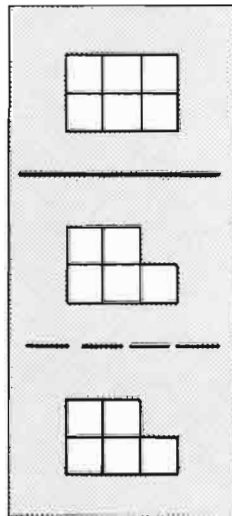
A.

3
7
5
15



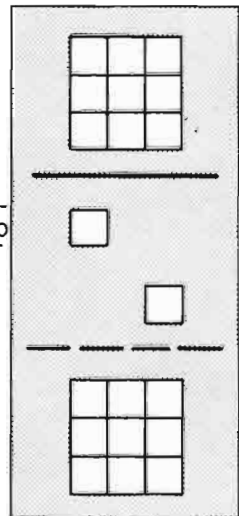
B.

4
4
4
12



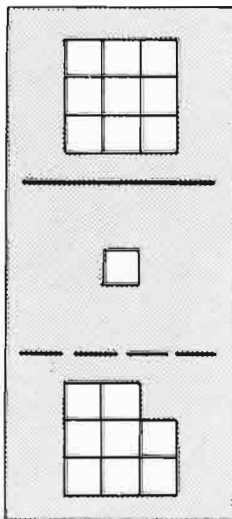
C.

6
5
5
16



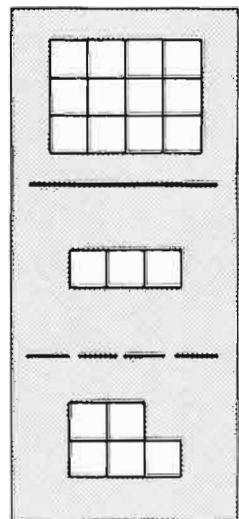
D.

9
2
9
20



E.

9
1
8
18

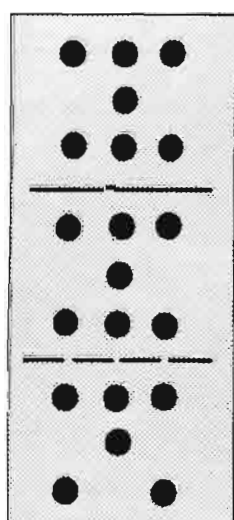
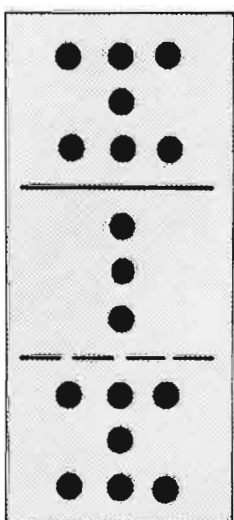
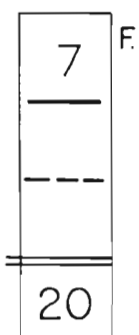
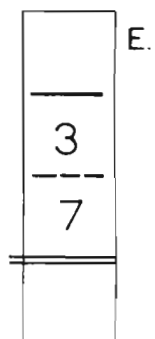
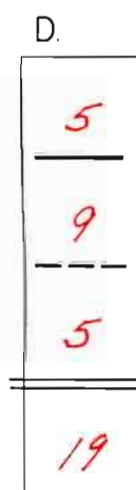
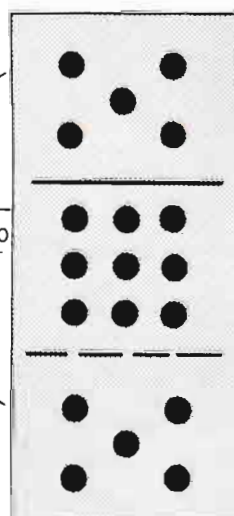
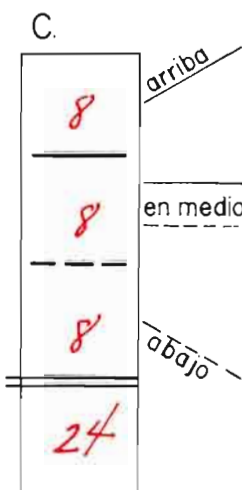
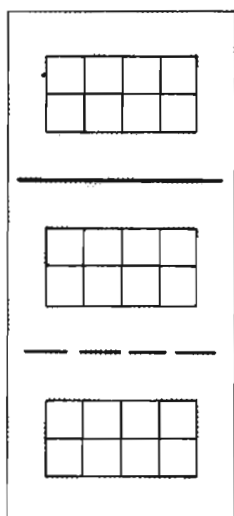
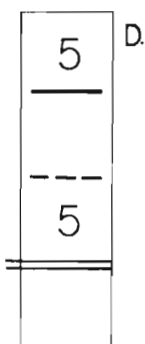
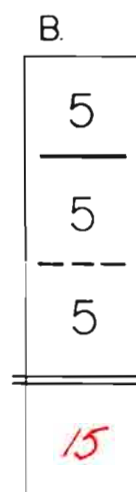
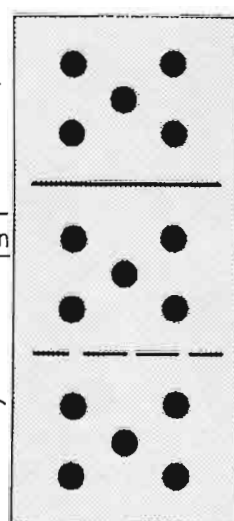
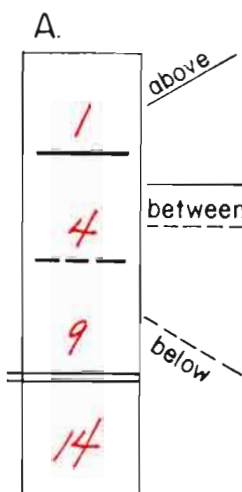
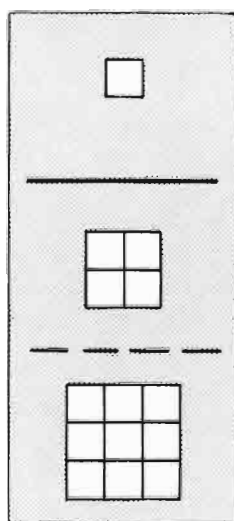
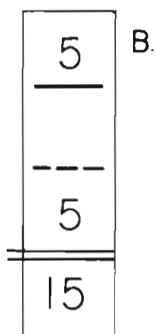
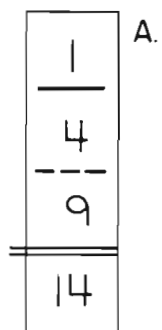


F.

12
3
5
20

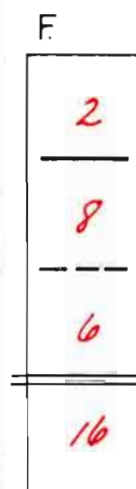
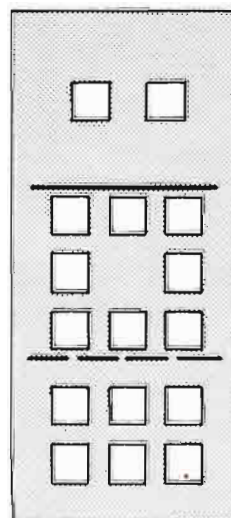
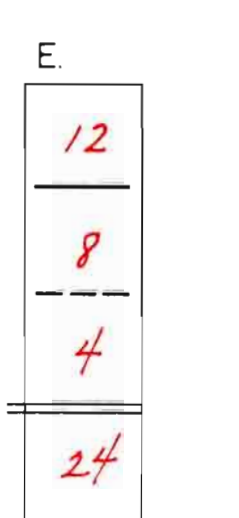
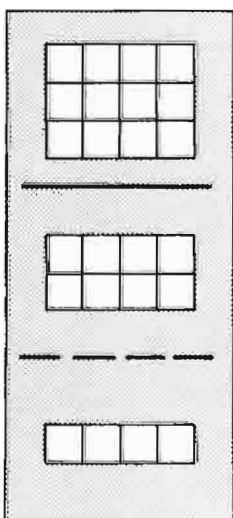
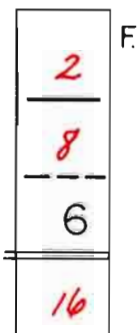
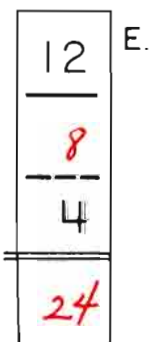
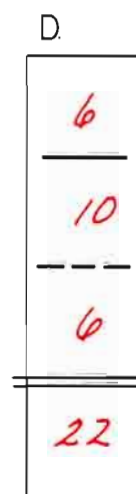
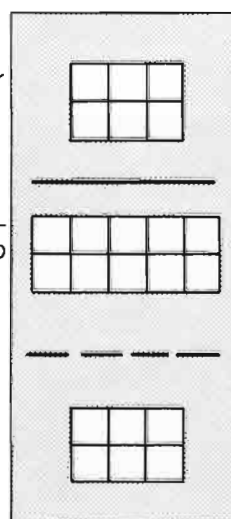
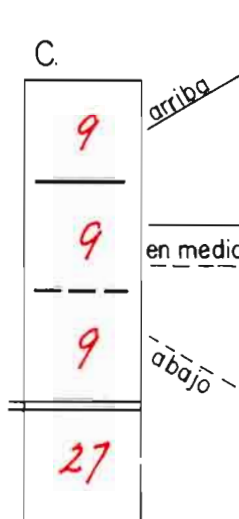
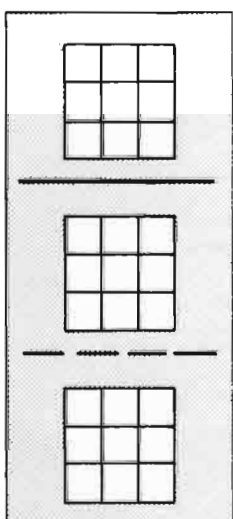
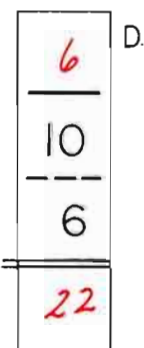
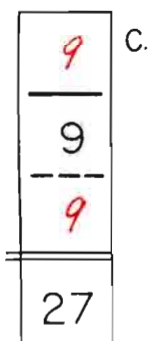
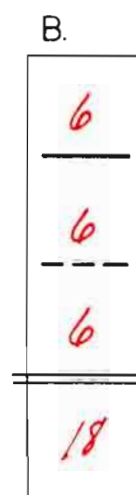
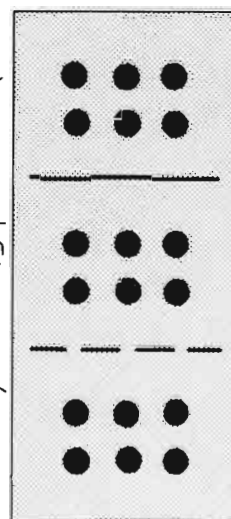
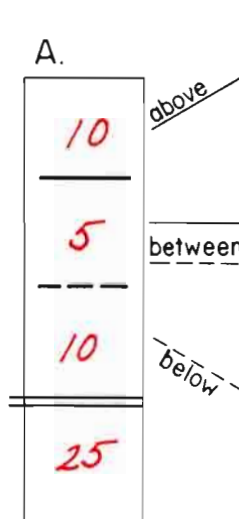
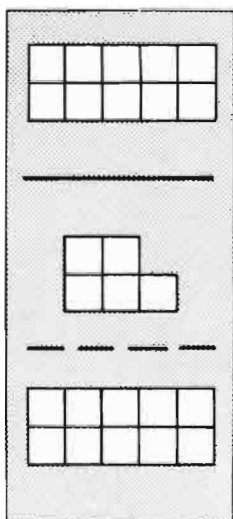
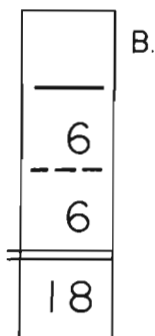
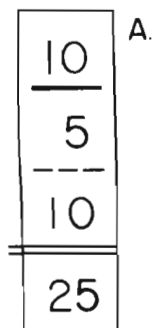
ABOVE BELOW and BETWEEN

ARRIBA ABAJO y EN MEDIO



ABOVE...BELOW...and BETWEEN

ARRIBA...ABAJO...y EN MEDIO



Some children may still need counters.

one way to complete each example

una manera de completar cada ejemplo

$$\begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ +2 \\ \hline 5 \end{array} \quad \begin{array}{r} 5 \\ -3 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ -2 \\ \hline 3 \end{array}$$

$2 + 3 = 5$

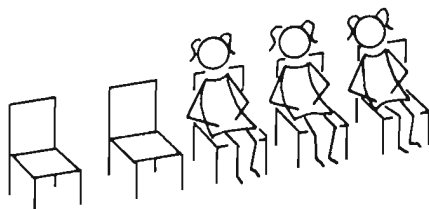
$5 - 3 = 2$

$3 + 2 = 5$

$5 - 2 = 3$

Fact Teams

Grupos de Cuentas



$$\begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ +2 \\ \hline 5 \end{array} \quad \begin{array}{r} 5 \\ -3 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ -2 \\ \hline 3 \end{array}$$

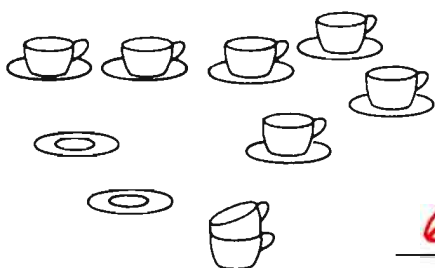


$$\begin{array}{r} 2 + 3 = 5 \\ 3 + 2 = 5 \end{array} \quad \begin{array}{r} 5 - 3 = 2 \\ 5 - 2 = 3 \end{array}$$

$$\begin{array}{r} 6 \\ +2 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ -2 \\ \hline 6 \end{array}$$

$2 + 6 = 8$

$8 - 6 = 2$



$$\begin{array}{r} 6 \\ +2 \\ \hline 8 \end{array} \quad \begin{array}{r} 2 \\ +6 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ -2 \\ \hline 6 \end{array} \quad \begin{array}{r} 8 \\ -6 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 6 + 2 = 8 \\ 2 + 6 = 8 \end{array} \quad \begin{array}{r} 8 - 2 = 6 \\ 8 - 6 = 2 \end{array}$$

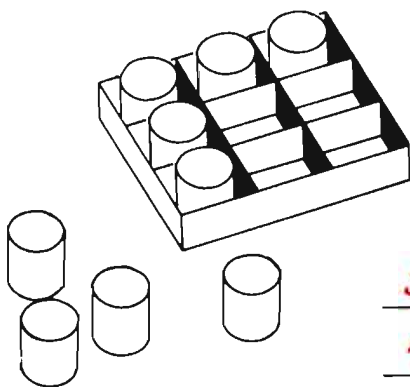
$$\begin{array}{r} 4 \\ +5 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ -5 \\ \hline 4 \end{array}$$

$5 + 4 =$

$9 - 4 =$

$4 + 5 =$

$9 - 5 =$



$$\begin{array}{r} 5 \\ +4 \\ \hline 9 \end{array} \quad \begin{array}{r} 4 \\ +5 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ -4 \\ \hline 5 \end{array} \quad \begin{array}{r} 9 \\ -5 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 5 + 4 = 9 \\ 4 + 5 = 9 \end{array} \quad \begin{array}{r} 9 - 4 = 5 \\ 9 - 5 = 4 \end{array}$$

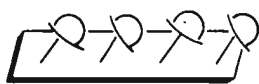
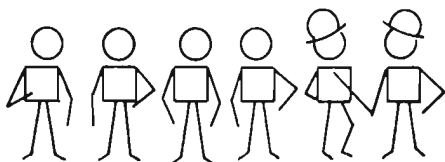
$$\begin{array}{r} 4 \\ +2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ +4 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ -4 \\ \hline \end{array}$$

$4 + 2 =$

$6 - 2 =$

$2 + 4 =$

$6 - 4 =$



$$\begin{array}{r} 4 \\ +2 \\ \hline 6 \end{array} \quad \begin{array}{r} 2 \\ +4 \\ \hline 6 \end{array} \quad \begin{array}{r} 6 \\ -2 \\ \hline 4 \end{array} \quad \begin{array}{r} 6 \\ -4 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 4 + 2 = 6 \\ 2 + 4 = 6 \end{array} \quad \begin{array}{r} 6 - 2 = 4 \\ 6 - 4 = 2 \end{array}$$

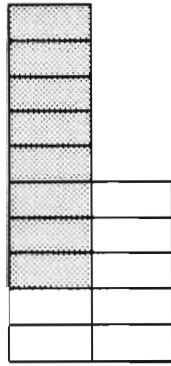
one way to complete each example

una manera de completar cada ejemplo

$$\begin{array}{r} 8 \\ +7 \\ \hline 15 \end{array} \quad \begin{array}{r} 7 \\ +8 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -8 \\ \hline 7 \end{array} \quad \begin{array}{r} 15 \\ -7 \\ \hline 8 \end{array}$$

$8 + 7 = 15 \quad 15 - 8 = \underline{\quad}$

$7 + 8 = 15 \quad 15 - 7 = \underline{\quad}$



$$\begin{array}{r} 8 \\ +7 \\ \hline 15 \end{array} \quad \begin{array}{r} 7 \\ +8 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -8 \\ \hline 7 \end{array} \quad \begin{array}{r} 15 \\ -7 \\ \hline 8 \end{array}$$

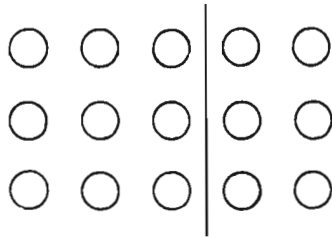
$8 + 7 = 15 \quad 15 - 8 = 7$

$7 + 8 = 15 \quad 15 - 7 = 8$

$$\begin{array}{r} 9 \\ +6 \\ \hline 15 \end{array} \quad \begin{array}{r} 6 \\ +9 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -6 \\ \hline 9 \end{array} \quad \begin{array}{r} 15 \\ -9 \\ \hline 6 \end{array}$$

$9 + 6 = \underline{\quad} \quad 15 - 6 = \underline{\quad}$

$6 + 9 = \underline{\quad} \quad 15 - 9 = \underline{\quad}$



$$\begin{array}{r} 9 \\ +6 \\ \hline 15 \end{array} \quad \begin{array}{r} 6 \\ +9 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -6 \\ \hline 9 \end{array} \quad \begin{array}{r} 15 \\ -9 \\ \hline 6 \end{array}$$

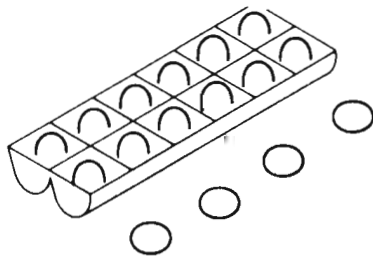
$9 + 6 = 15 \quad 15 - 6 = 9$

$6 + 9 = 15 \quad 15 - 9 = 6$

$$\begin{array}{r} 12 \\ +4 \\ \hline 16 \end{array} \quad \begin{array}{r} 16 \\ -4 \\ \hline 12 \end{array}$$

$12 + 4 = \underline{\quad} \quad 16 - 4 = \underline{\quad}$

$4 + 12 = \underline{\quad} \quad 16 - 12 = \underline{\quad}$



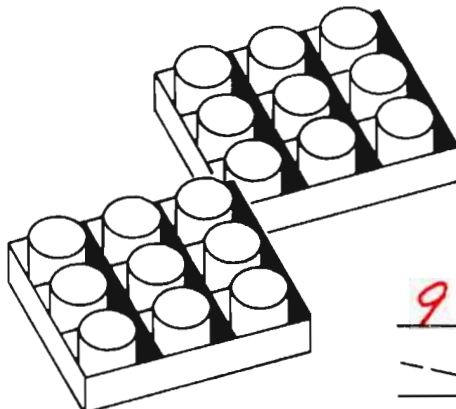
$$\begin{array}{r} 12 \\ +4 \\ \hline 16 \end{array} \quad \begin{array}{r} 4 \\ +12 \\ \hline 16 \end{array} \quad \begin{array}{r} 16 \\ -4 \\ \hline 12 \end{array} \quad \begin{array}{r} 16 \\ -12 \\ \hline 4 \end{array}$$

$12 + 4 = 16 \quad 16 - 4 = 12$

$4 + 12 = 16 \quad 16 - 12 = 4$

$$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array}$$

$9 + 9 = \underline{\quad} \quad 18 - 9 = \underline{\quad}$



$$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array} \quad \begin{array}{r} \cancel{9} \\ +\cancel{9} \\ \hline \cancel{18} \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array} \quad \begin{array}{r} \cancel{18} \\ -\cancel{9} \\ \hline \cancel{9} \end{array}$$

$9 + 9 = 18 \quad 18 - 9 = 9$

~~$$\begin{array}{r} + \\ \hline = \end{array} \quad \begin{array}{r} - \\ \hline = \end{array}$$~~

one way to complete

una manera de completarlo

$$\begin{array}{r} 9 \\ +8 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 17 \\ -8 \\ \hline \end{array} \quad \begin{array}{r} 17 \\ -9 \\ \hline \end{array}$$

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

$17 - 8 = \underline{\quad}$

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

$17 - 9 = \underline{\quad}$

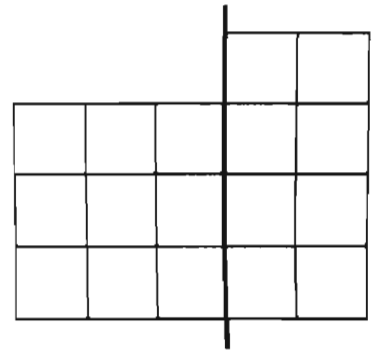
$$\begin{array}{r} 9 \\ +8 \\ \hline 17 \end{array} \quad \begin{array}{r} 8 \\ +9 \\ \hline 17 \end{array} \quad \begin{array}{r} 17 \\ -8 \\ \hline 9 \end{array} \quad \begin{array}{r} 17 \\ -9 \\ \hline 8 \end{array}$$

$9 + 8 = 17$

$17 - 8 = 9$

$8 + 9 = 17$

$17 - 9 = 8$



$$\begin{array}{r} 7 \\ +7 \\ \hline \end{array} \quad \begin{array}{r} 14 \\ -7 \\ \hline \end{array}$$

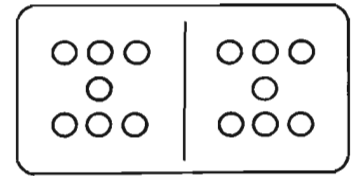
$7 + 7 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$$\begin{array}{r} 7 \\ +7 \\ \hline 14 \end{array} \quad \begin{array}{r} 14 \\ -7 \\ \hline 7 \end{array}$$

$7 + 7 = 14$

$14 - 7 = 7$



$$\begin{array}{r} 4 \\ +9 \\ \hline 13 \end{array} \quad \begin{array}{r} 9 \\ +4 \\ \hline 13 \end{array} \quad \begin{array}{r} 13 \\ -9 \\ \hline 4 \end{array} \quad \begin{array}{r} 13 \\ -4 \\ \hline 9 \end{array}$$

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

$13 - 9 = \underline{\quad}$

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

$13 - 4 = \underline{\quad}$

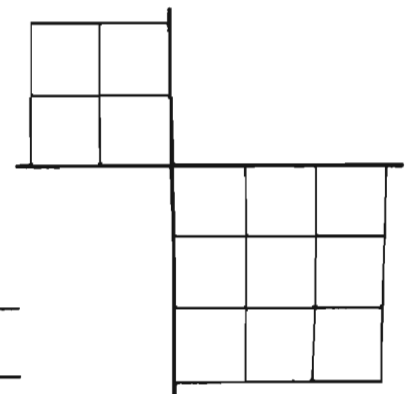
$$\begin{array}{r} 4 \\ +9 \\ \hline 13 \end{array} \quad \begin{array}{r} 9 \\ +4 \\ \hline 13 \end{array} \quad \begin{array}{r} 13 \\ -9 \\ \hline 4 \end{array} \quad \begin{array}{r} 13 \\ -4 \\ \hline 9 \end{array}$$

$4 + 9 = 13$

$13 - 9 = 4$

$9 + 4 = 13$

$13 - 4 = 9$



$$\begin{array}{r} 6 \\ +6 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ -6 \\ \hline \end{array}$$

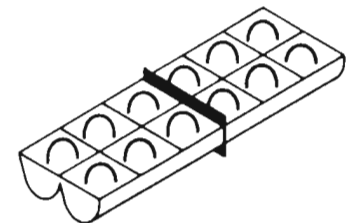
$6 + 6 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$$\begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array} \quad \begin{array}{r} 12 \\ -6 \\ \hline 6 \end{array}$$

$6 + 6 = 12$

$12 - 6 = 6$



one way to complete

una manera de completarlo

$$\begin{array}{r} 9 \\ +7 \\ \hline 16 \end{array} \quad \begin{array}{r} 7 \\ +9 \\ \hline 16 \end{array} \quad \begin{array}{r} 16 \\ -7 \\ \hline 9 \end{array} \quad \begin{array}{r} 16 \\ -9 \\ \hline 7 \end{array}$$

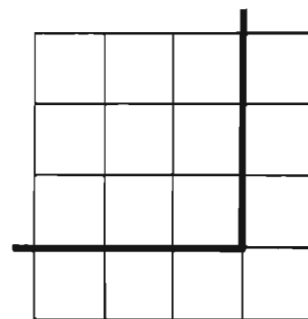
9 + 7 = ___ 16 - 7 = ___

7 + 9 = ___ 16 - 9 = ___

$$\begin{array}{|c|} \hline 9 \\ \hline + \\ \hline 7 \\ \hline \hline 16 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 7 \\ \hline + \\ \hline 9 \\ \hline \hline 16 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 16 \\ \hline - \\ \hline 7 \\ \hline \hline 9 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 16 \\ \hline - \\ \hline 9 \\ \hline \hline 7 \\ \hline \end{array}$$

9 + 7 = 16 16 - 7 = 9

7 + 9 = 16 16 - 9 = 7



$$\begin{array}{r} 6 \\ +7 \\ \hline 13 \end{array} \quad \begin{array}{r} 7 \\ +6 \\ \hline 13 \end{array} \quad \begin{array}{r} 13 \\ -7 \\ \hline 6 \end{array} \quad \begin{array}{r} 13 \\ -6 \\ \hline 7 \end{array}$$

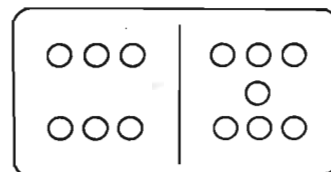
6 + 7 = ___ ___ - 7 = 6

7 + 6 = ___ ___ - 6 = 7

$$\begin{array}{|c|} \hline 6 \\ \hline + \\ \hline 7 \\ \hline \hline 13 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 7 \\ \hline + \\ \hline 6 \\ \hline \hline 13 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 13 \\ \hline - \\ \hline 7 \\ \hline \hline 6 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 13 \\ \hline - \\ \hline 6 \\ \hline \hline 7 \\ \hline \end{array}$$

6 + 7 = 13 13 - 7 = 6

7 + 6 = 13 13 - 6 = 7

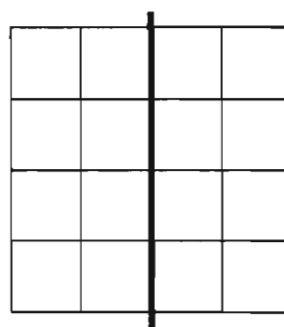


$$\begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array}$$

8 + 8 = ___ 16 - 8 = 8

$$\begin{array}{|c|} \hline 8 \\ \hline + \\ \hline 8 \\ \hline \hline 16 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 16 \\ \hline - \\ \hline 8 \\ \hline \hline 8 \\ \hline \end{array}$$

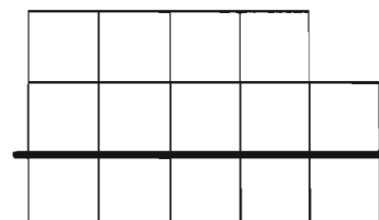
8 + 8 = 16 16 - 8 = 8



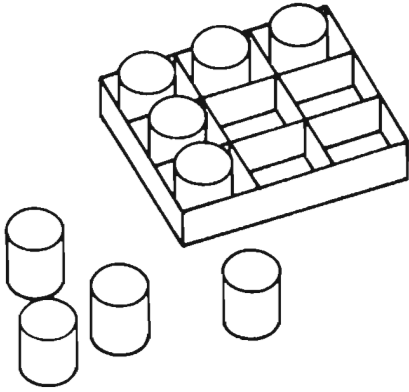
$$\begin{array}{|c|} \hline 9 \\ \hline + \\ \hline 5 \\ \hline \hline 14 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 5 \\ \hline + \\ \hline 9 \\ \hline \hline 14 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 14 \\ \hline - \\ \hline 5 \\ \hline \hline 9 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 14 \\ \hline - \\ \hline 9 \\ \hline \hline 5 \\ \hline \end{array}$$

9 + 5 = 14 14 - 5 = 9

5 + 9 = 14 14 - 9 = 5



On Your Own
Usted Solo



Fact Teams

$$\begin{array}{r} 5 \\ + 4 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline 9 \end{array}$$

Grupos de Cuentas

$$\begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline 5 \end{array}$$

$$\underline{5 + 4 = 9}$$

$$\underline{4 + 5 = 9}$$

$$\underline{9 - 5 = 4}$$

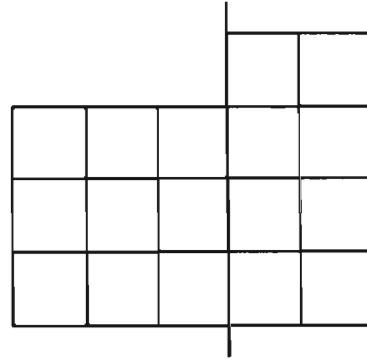
$$\underline{9 - 4 = 5}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 17 \\ - 9 \\ \hline 8 \end{array}$$



$$\underline{9 + 8 = 17}$$

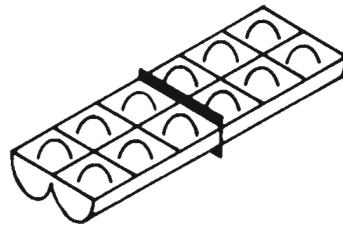
$$\underline{8 + 9 = 17}$$

$$\underline{17 - 8 = 9}$$

$$\underline{17 - 9 = 8}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 12 \\ - 6 \\ \hline 6 \end{array}$$



$$\underline{6 + 6 = 12}$$

$$\underline{12 - 6 = 6}$$



How do you feel?

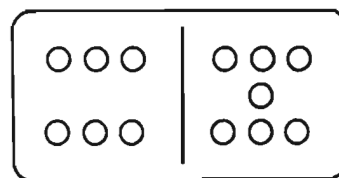
¿Cómo se siente?

$$\begin{array}{r} 6 \\ + 7 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 13 \\ - 6 \\ \hline 7 \end{array}$$



$$\underline{6 + 7 = 13}$$

$$\underline{7 + 6 = 13}$$

$$\underline{13 - 7 = 6}$$

$$\underline{13 - 6 = 7}$$

Dear Parent,

An important principle of CDA math is that children can communicate their understanding of ordinary arithmetic by merely learning to record what they can see. In the pages preceeding this progress test your child has been investigating the various ways of writing about number facts such as those on the reverse side of this letter. There are only 4 facts per page but all possible combinations are considered - always with pictures for counting.

At home you can assist this progress by continuing to work with beanstick combinations and dominoes. Look especially for combinations of things that make 10. For instance, 5 cups and 5 saucers make 10, etc. There are endless numbers of things to count, to add and to subtract, all around us. A few minutes taken to share this "child's play" arithmetic will really pay off. Each experience builds a better foundation for success in arithmetic.

If in recording the results of experiments with arithmetic your child writes his twos, fives, threes, etc. backwards, we hope that you will recall the message of a level A letter; namely, these reversals have no specific cut-off date and they are most likely to occur when a child is under pressure. We know some ten year olds who still reverse numerals - but we don't know any adults who have that problem.

Your patience, loving concern and justifiable pride in your child's progress are vital ingredients to continued success.

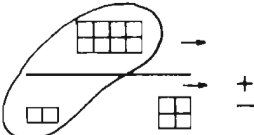
Sincerely,

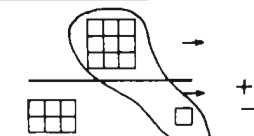
The number of blocks above the line goes in the top box; the number below the line goes in the middle box. The ten looped may come from above and below. See also:
 D&P pp 85-93
 140-142

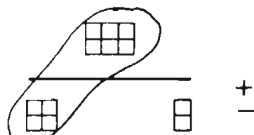
9	6	3	8	1	5	7	4	2
+1	+4	+7	+2	+9	+5	+3	+6	+8
10	10	10	10	10	10	10	10	10

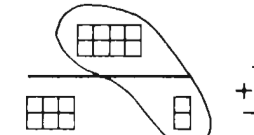
one way to complete
 una manera de completarlo

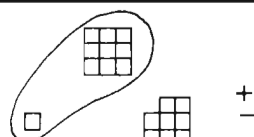
Please loop 10 blocks and give the total.
 Favor de encerrar 10 cuadros y dé el total.

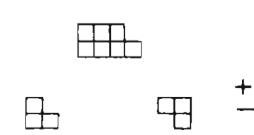
A. 
$$\begin{array}{r} 8 \\ +6 \\ \hline 14 \end{array}$$


B. 
$$\begin{array}{r} 9 \\ +7 \\ \hline 16 \end{array}$$

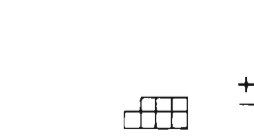
C. 
$$\begin{array}{r} 6 \\ +6 \\ \hline \dots \end{array}$$

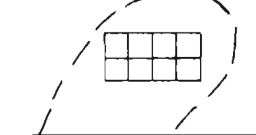
D. 
$$\begin{array}{r} \dots \\ + \dots \\ \hline 16 \end{array}$$

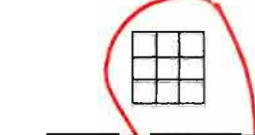
E. 
$$\begin{array}{r} 9 \\ +9 \\ \hline \dots \end{array}$$

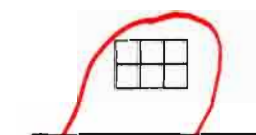
F. 
$$\begin{array}{r} 7 \\ +6 \\ \hline \dots \end{array}$$

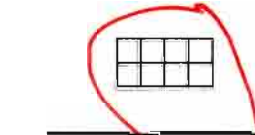
G. 
$$\begin{array}{r} 9 \\ +6 \\ \hline \dots \end{array}$$

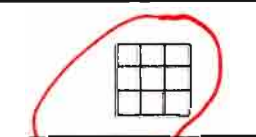
H. 
$$\begin{array}{r} 9 \\ +8 \\ \hline \dots \end{array}$$

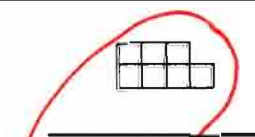
A. 
$$\begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array}$$

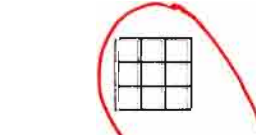
B. 
$$\begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array}$$

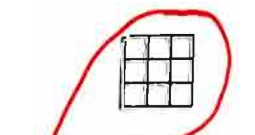
C. 
$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$

D. 
$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$$

E. 
$$\begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$


F. 
$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$


G. 
$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$$

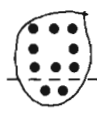
H. 
$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}$$


one way to complete the examples

una manera de completar los ejemplos

a. 
$$\begin{array}{r} 7 \\ + 4 \\ \hline 11 \end{array}$$

b. 
$$\begin{array}{r} 9 \\ + 5 \\ \hline 14 \end{array}$$

c. 
$$\begin{array}{r} 8 \\ + 2 \\ \hline 10 \end{array}$$

d. 
$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

e.
$$\begin{array}{r} \text{---} \\ + 4 \\ \hline 13 \end{array}$$

f.
$$\begin{array}{r} \text{---} \\ + 6 \\ \hline 8 \end{array}$$

g.
$$\begin{array}{r} \text{---} \\ + 5 \\ \hline 12 \end{array}$$

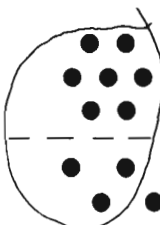
h.
$$\begin{array}{r} \text{---} \\ + 6 \\ \hline \text{---} \end{array}$$

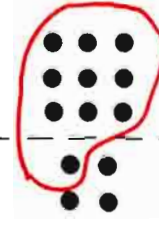
i.
$$\begin{array}{r} \text{---} \\ + 8 \\ \hline \text{---} \end{array}$$

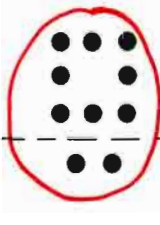
j.
$$\begin{array}{r} \text{---} \\ + 7 \\ \hline \text{---} \end{array}$$

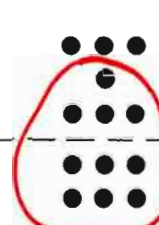
Please loop 10 dots and complete the addition examples.

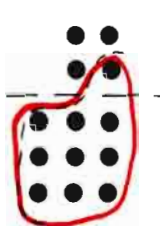
Favor de encerrar 10 puntos y de completar los ejemplos de sumas.

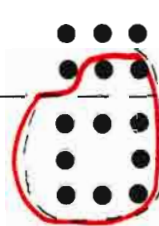
a. 
$$\begin{array}{r} 7 \\ + 4 \\ \hline \text{---} \\ \text{---} \end{array}$$

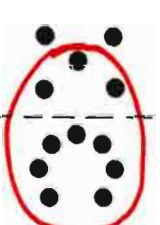
b. 
$$\begin{array}{r} 9 \\ + 5 \\ \hline 14 \end{array}$$

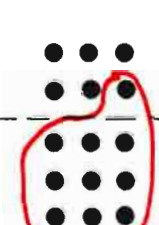
c. 
$$\begin{array}{r} 8 \\ + 2 \\ \hline 10 \end{array}$$


d. 
$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

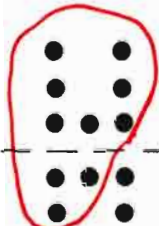
e. 
$$\begin{array}{r} 4 \\ + 9 \\ \hline 13 \end{array}$$

f. 
$$\begin{array}{r} 6 \\ + 8 \\ \hline 14 \end{array}$$

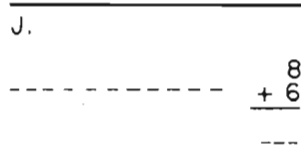
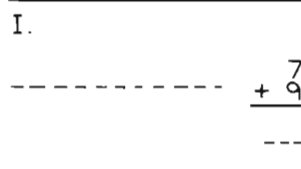
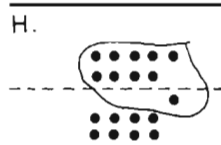
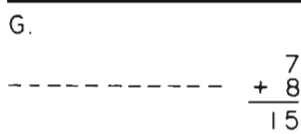
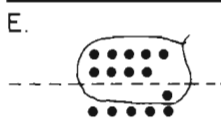
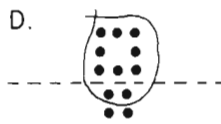
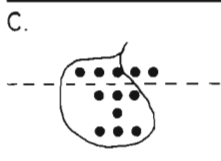
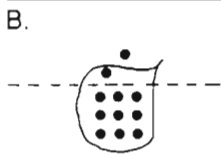
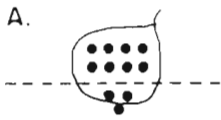
g. 
$$\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array}$$

h. 
$$\begin{array}{r} 6 \\ + 9 \\ \hline 15 \end{array}$$

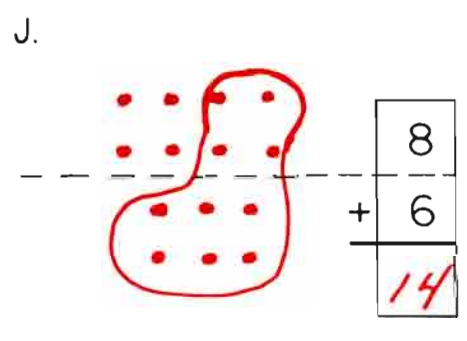
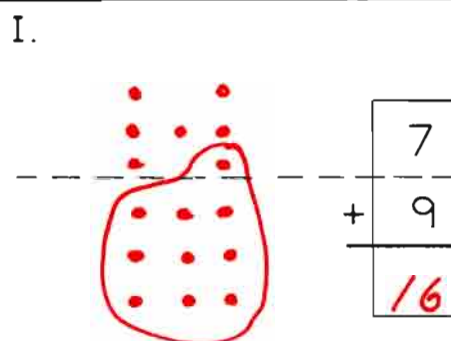
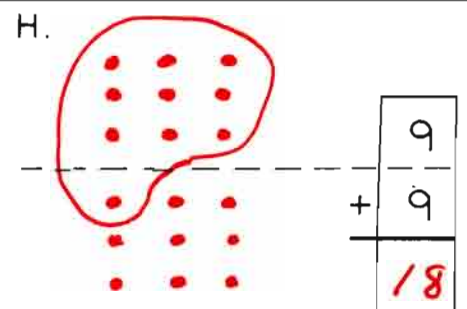
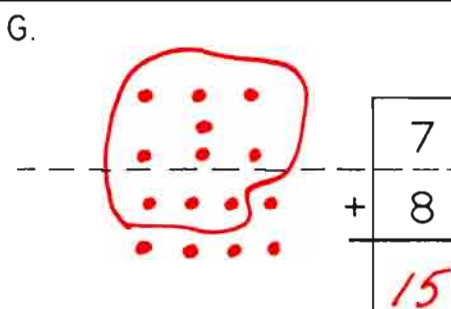
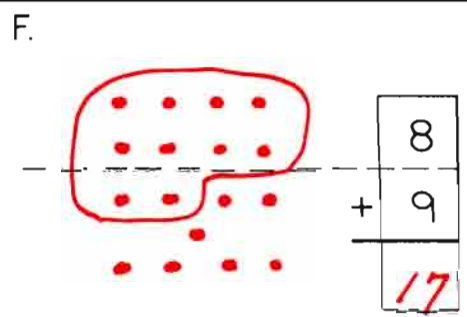
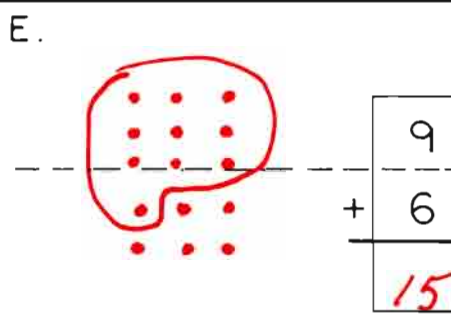
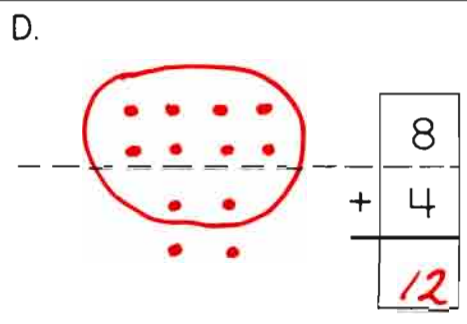
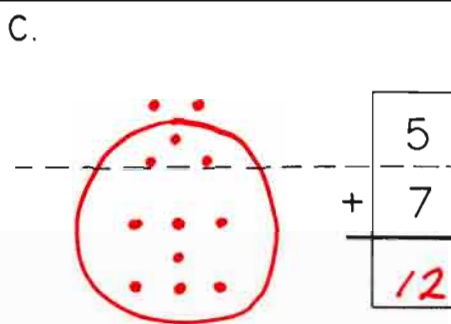
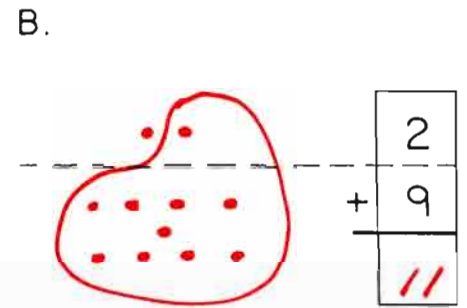
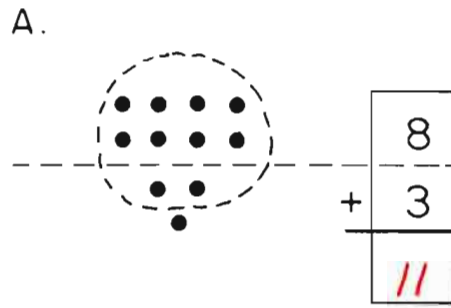
i. 
$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$$

j. 
$$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array}$$

one way to complete
una manera de completarlo



Please draw your own sketches and complete.
Favor de hacer sus propios dibujos y completarlos.



one way to complete
una manera de completarlo

Please loop 10 and
complete the arithmetic.

Favor de encerrar 10 y
de completar la aritmética.

a.	b.	c.	a.	b.	c.
$\frac{9}{14} + \frac{5}{14} = \frac{14}{14}$	$\frac{8}{22} + \frac{4}{12}$	$\frac{9}{23} + \frac{3}{12}$	$\frac{9}{14} + \frac{5}{14} = \frac{14}{14}$	$\frac{8}{22} + \frac{4}{12} = \frac{12}{12}$	$\frac{9}{21} + \frac{3}{12} = \frac{12}{12}$
d.	e.	f.	d.	e.	f.
$\frac{7}{31} + \frac{4}{14}$	$\frac{6}{14} + \frac{3}{23}$	$\frac{8}{23} + \frac{5}{11}$	$\frac{7}{31} + \frac{4}{14} = \frac{11}{11}$	$\frac{6}{14} + \frac{5}{11} = \frac{11}{11}$	$\frac{8}{23} + \frac{5}{11} = \frac{13}{13}$
g.	h.	i.	g.	h.	i.
$\frac{9}{13} + \frac{4}{21}$	$\frac{8}{21} + \frac{3}{23}$	$\frac{7}{23} + \frac{5}{11}$	$\frac{9}{13} + \frac{4}{21} = \frac{13}{13}$	$\frac{8}{21} + \frac{3}{11} = \frac{11}{11}$	$\frac{7}{23} + \frac{5}{11} = \frac{12}{12}$
j.	k.	l.	j.	k.	l.
$\frac{9}{11} + \frac{2}{4}$	$\frac{8}{22} + \frac{4}{12}$	$\frac{9}{51} + \frac{6}{15}$	$\frac{9}{11} + \frac{2}{11} = \frac{11}{11}$	$\frac{8}{22} + \frac{4}{12} = \frac{12}{12}$	$\frac{9}{15} + \frac{6}{15} = \frac{15}{15}$
m.	n.	o.	m.	n.	o.
$\frac{8}{24} + \frac{6}{14}$	$\frac{9}{61} + \frac{7}{58}$	$\frac{8}{24} + \frac{6}{14} = \frac{14}{14}$	$\frac{8}{24} + \frac{6}{14} = \frac{14}{14}$	$\frac{9}{16} + \frac{7}{16} = \frac{16}{16}$	$\frac{8}{23} + \frac{5}{13} = \frac{13}{13}$
p.	q.	r.	p.	q.	r.
$\frac{9}{17} + \frac{8}{7}$	$\frac{9}{81} + \frac{9}{99}$	$\frac{9}{17} + \frac{8}{7} = \frac{17}{17}$	$\frac{9}{17} + \frac{8}{7} = \frac{17}{17}$	$\frac{8}{52} + \frac{7}{15} = \frac{15}{15}$	$\frac{9}{18} + \frac{9}{18} = \frac{18}{18}$

A.

$$10 + 2 = \text{X}12$$

$$10 - 3 = 7$$

$$10 + 3 = \dots$$

$\frac{10}{-5}$	$\frac{10}{+5}$	$\frac{10}{-8}$	$\frac{10}{+10}$
$\frac{5}{5}$	$\frac{5}{5}$	$\frac{2}{2}$	$\frac{2}{2}$

B.

$$8 - 2 = 6$$

$$8 + 3 = 11$$

$$8 - 3 = \dots$$

$\frac{5}{+8}$	$\frac{8}{+7}$	$\frac{10}{+8}$	$\frac{12}{+8}$
$\frac{13}{13}$	$\frac{15}{15}$	$\frac{18}{18}$	$\frac{20}{20}$

C.

$$5 - 1 = \dots$$

$$5 + 6 = 11$$

$$8 + 5 = 13$$

$\frac{15}{+5}$	$\frac{5}{+9}$	$\frac{20}{-5}$	$\frac{20}{-15}$
$\frac{20}{20}$	$\frac{14}{14}$	$\frac{15}{15}$	$\frac{5}{5}$

D.

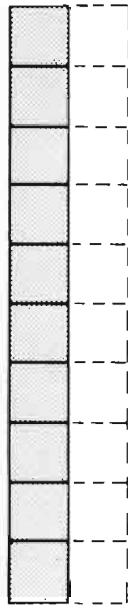
$$7 + 3 = 10$$

$$7 + 4 = 11$$

$$7 - 7 = 0$$

$\frac{9}{+7}$	$\frac{20}{-7}$
$\frac{16}{16}$	$\frac{13}{13}$

A.



$$\frac{10}{+2} = 12$$

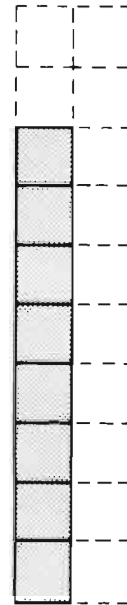
$$\frac{10}{-3} = 7$$

$$\frac{10}{+3} = 13$$

$$\frac{10}{-2} = 8$$

$\frac{10}{-5}$	$\frac{10}{+5}$	$\frac{10}{-8}$	$\frac{10}{+10}$
$\frac{5}{5}$	$\frac{15}{15}$	$\frac{2}{2}$	$\frac{20}{20}$

B.



$$\frac{8}{-2} = 6$$

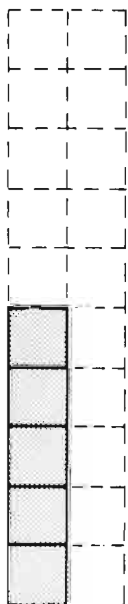
$$\frac{8}{+3} = 11$$

$$\frac{8}{-3} = 5$$

$$\frac{8}{+2} = 10$$

$\frac{5}{+8}$	$\frac{8}{+7}$	$\frac{10}{+8}$	$\frac{12}{+8}$
$\frac{13}{13}$	$\frac{15}{15}$	$\frac{18}{18}$	$\frac{20}{20}$

C.



$$\frac{5}{-1} = 4$$

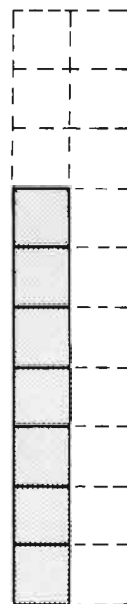
$$\frac{5}{+6} = 11$$

$$\frac{8}{+5} = 13$$

$$\frac{5}{+5} = 10$$

$\frac{15}{+5}$	$\frac{5}{+9}$	$\frac{20}{-5}$	$\frac{20}{-15}$
$\frac{20}{20}$	$\frac{14}{14}$	$\frac{15}{15}$	$\frac{5}{5}$

D.



$$\frac{7}{+3} = 10$$

$$\frac{7}{-3} = 4$$

$$\frac{7}{+4} = 11$$

$$\frac{7}{+6} = 13$$

$$\frac{7}{-7} = 0$$

$$\frac{7}{+1} = 8$$

$\frac{9}{+7}$	$\frac{20}{-7}$
$\frac{16}{16}$	$\frac{13}{13}$

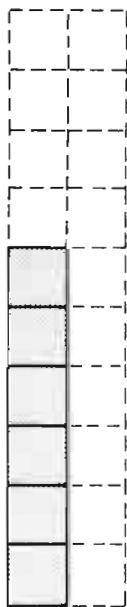
E.

$$\begin{array}{r}
 6 + 9 = 15 \\
 20 - 6 = 14 \\
 6 + 5 = \underline{\quad} \quad \begin{array}{r} 6 \\ + 8 \\ \hline 12 \\ - 6 \\ \hline \end{array} \\
 13 - 6 = 7 \quad \begin{array}{r} \quad \\ \quad \\ \hline \end{array} \quad \begin{array}{r} \quad \\ \quad \\ \hline \end{array} \\
 \\
 \begin{array}{r}
 10 \quad 6 \\
 - \quad + 7 \\
 \hline 6 \quad 13
 \end{array}
 \end{array}$$

F.

$$\begin{array}{r}
 9 + 5 = 14 \\
 9 + 4 = 13 \quad \begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}
 \end{array}$$

E.



$$\begin{array}{r}
 20 - 6 = \underline{14} \\
 6 + 5 = \underline{11} \\
 13 - 6 = \underline{7} \\
 6 + 9 = \underline{15}
 \end{array}$$

$$\begin{array}{r}
 10 \quad 6 \\
 - \underline{4} \quad + 7 \\
 \hline 6 \quad 13
 \end{array}$$

$$\begin{array}{r}
 6 \quad 12 \\
 + 8 \quad - 6 \\
 \hline 14 \quad 6
 \end{array}$$

F.



$$\begin{array}{r}
 9 + 5 = \underline{14} \\
 9 + 4 = \underline{13} \\
 9 + 6 = \underline{15} \\
 9 + 3 = \underline{12}
 \end{array}$$

$$\begin{array}{r}
 9 \quad 20 \\
 + 9 \quad - 9 \\
 \hline 18 \quad 11
 \end{array}$$

$$\begin{array}{r}
 9 \quad 9 \\
 + 8 \quad + 7 \\
 \hline 17 \quad 16
 \end{array}$$

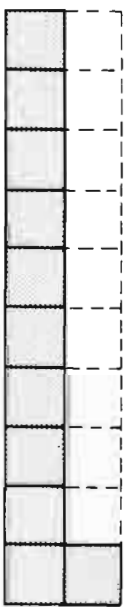
G.

$$\begin{array}{r}
 11 - 8 = 3 \\
 11 - 5 = 6 \quad \begin{array}{r} 11 \\ - 4 \\ \hline 7 \end{array} \\
 9 + \underline{\quad} = 11 \quad \begin{array}{r} 8 \\ + 3 \\ \hline 11 \end{array} \\
 \\
 \begin{array}{r}
 8 \\
 + 3 \\
 \hline 11
 \end{array}
 \end{array}$$

H.

$$\begin{array}{r}
 12 - 10 = 2 \\
 12 - 9 = 3 \\
 10 + 2 = 12 \quad \begin{array}{r} 12 \\ - 5 \\ \hline 7 \end{array} \quad \begin{array}{r} 12 \\ - 8 \\ \hline 4 \end{array} \\
 \\
 \begin{array}{r}
 12 \\
 - 6 \\
 \hline 6
 \end{array}
 \end{array}$$

G.



$$\begin{array}{r}
 11 - 8 = \underline{3} \\
 11 - 5 = \underline{6} \\
 9 + \underline{2} = 11 \\
 11 - 2 = \underline{9}
 \end{array}$$

$$\begin{array}{r}
 6 \quad 8 \\
 + \underline{5} \quad + 3 \\
 \hline 11 \quad 11
 \end{array}$$

$$\begin{array}{r}
 11 \quad 11 \\
 - 4 \quad - 10 \\
 \hline 7 \quad 1
 \end{array}$$

H.



$$\begin{array}{r}
 12 - 9 = \underline{3} \\
 10 + \underline{2} = 12 \\
 \underline{6} + 6 = 12 \\
 12 - 10 = \underline{2}
 \end{array}$$

$$\begin{array}{r}
 12 \quad 12 \quad 12 \quad 20 \\
 - 5 \quad - 8 \quad - 6 \quad - 12 \\
 \hline 7 \quad 4 \quad 6 \quad 8
 \end{array}$$

I.

$$20 - 13 = 7$$

$$13 - 4 = 9$$

$$13 - 6 = \underline{\quad}$$

$$6 + 7 = 13$$

$$\begin{array}{r} 13 \\ -7 \\ \hline 6 \end{array} \quad \begin{array}{r} 13 \\ -5 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 13 \\ -8 \\ \hline 5 \end{array}$$

J.

$$14 - 4 = 10$$

$$14 - 10 = 4$$

$$14 + 6 = 20$$

$$4 + 10 = 14$$

$$\begin{array}{r} 14 \\ -8 \\ \hline 6 \end{array} \quad \begin{array}{r} 14 \\ -6 \\ \hline 8 \end{array}$$

K.

$$15 - 10 = 5$$

$$15 - 9 = 6$$

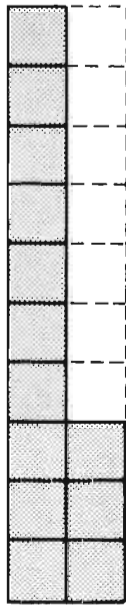
$$15 + 5 = 20$$

$$20 - 5 = 15$$

$$\begin{array}{r} 9 \\ +6 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -7 \\ \hline 8 \end{array}$$

L.

I.



$$\underline{13 - 4 = 9}$$

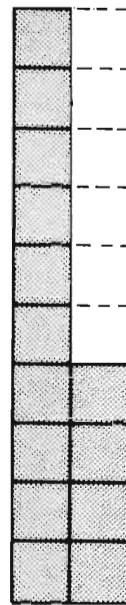
$$\underline{13 - 6 = 7}$$

$$\underline{6 + 7 = 13}$$

$$\underline{20 - 13 = 7}$$

$$\begin{array}{r} 13 \\ -8 \\ \hline 5 \end{array} \quad \begin{array}{r} 13 \\ -7 \\ \hline 6 \end{array} \quad \begin{array}{r} 13 \\ -4 \\ \hline 9 \end{array} \quad \begin{array}{r} 13 \\ -5 \\ \hline 8 \end{array}$$

J.



$$\underline{4 + 10 = 14}$$

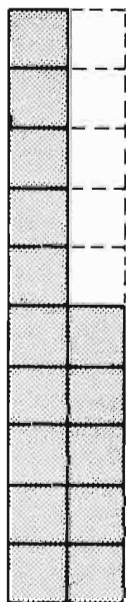
$$\underline{14 - 4 = 10}$$

$$\underline{14 - 10 = 4}$$

$$\underline{14 + 6 = 20}$$

$$\begin{array}{r} 14 \\ -8 \\ \hline 6 \end{array} \quad \begin{array}{r} 14 \\ -6 \\ \hline 8 \end{array} \quad \begin{array}{r} 14 \\ -5 \\ \hline 9 \end{array} \quad \begin{array}{r} 14 \\ -7 \\ \hline 7 \end{array}$$

K.



$$\underline{15 + 5 = 20}$$

$$\underline{20 - 5 = 15}$$

$$\underline{15 - 10 = 5}$$

$$\underline{15 - 9 = 6}$$

$$\begin{array}{r} 9 \\ +6 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \\ -6 \\ \hline 9 \end{array} \quad \begin{array}{r} 15 \\ -3 \\ \hline 12 \end{array} \quad \begin{array}{r} 15 \\ -7 \\ \hline 8 \end{array}$$

L.



$$\underline{16 + 4 = 20}$$

$$\underline{16 - 7 = 9}$$

$$\underline{20 - 4 = 16}$$

$$\underline{16 - 9 = 7}$$

$$\begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array} \quad \begin{array}{r} 16 \\ -11 \\ \hline 5 \end{array} \quad \begin{array}{r} 16 \\ -5 \\ \hline 11 \end{array} \quad \begin{array}{r} 20 \\ -16 \\ \hline 4 \end{array}$$

M.

$$17 - 8 = 9$$

$$20 - 3 = 17$$

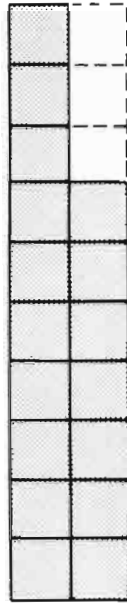
$$\begin{array}{r} 17 \\ + 3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 17 \\ - 3 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 18 \\ - 7 \\ \hline 11 \end{array}$$

$$\begin{array}{r} -9 \\ -9 \\ \hline 9 \end{array}$$

M.



$$\underline{17 - 8} = \underline{9}$$

$$\underline{20 - 3} = \underline{17}$$

$$\underline{8 + 9} = \underline{17}$$

$$\underline{18 - 8} = \underline{10}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 17 \\ - 3 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 17 \\ + 3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 10 \\ + 7 \\ \hline 17 \end{array}$$

N.



$$\underline{18 - 9} = \underline{9}$$

$$\underline{15 + 3} = \underline{18}$$

$$\underline{20 - 18} = \underline{2}$$

$$\underline{17 - 7} = \underline{10}$$

$$\begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 18 \\ - 5 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 18 \\ - 4 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 18 \\ - 7 \\ \hline 11 \end{array}$$

O.

$$13 - 4 = 9$$

$$8 + 7 = 15$$

$$14 - 5 = 9$$

$$8 + 9 = 17$$

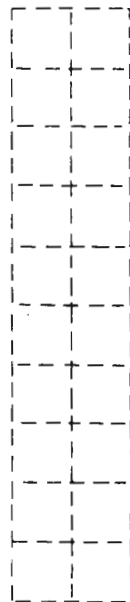
$$\begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 13 \\ - 6 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 14 \\ - 9 \\ \hline 5 \end{array}$$

O.



$$\underline{6 + 7} = \underline{13}$$

$$\underline{8 + 7} = \underline{15}$$

$$\underline{5 + 8} = \underline{13}$$

$$\underline{8 + 9} = \underline{17}$$

$$\underline{13 - 4} = \underline{9}$$

$$\underline{16 - 8} = \underline{8}$$

$$\underline{14 - 5} = \underline{9}$$

$$\underline{16 - 9} = \underline{7}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 8 \\ + 5 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array}$$

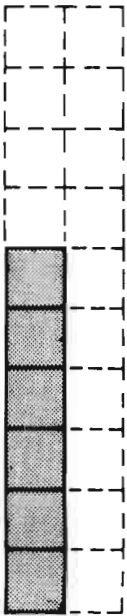
$$\begin{array}{r} 13 \\ - 6 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 14 \\ - 8 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 14 \\ - 9 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 18 \\ - 9 \\ \hline 9 \end{array}$$

On Your Own



$$\begin{array}{r} 6 + 4 = 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 + 6 = 16 \\ \hline \end{array}$$

$$\begin{array}{r} 6 + 9 = 15 \\ \hline \end{array}$$

$$\begin{array}{r} 20 - 6 = 14 \\ \hline \end{array}$$

$$\begin{array}{r} 6 + 5 = 11 \\ \hline \end{array}$$

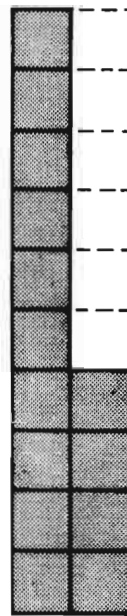
$$\begin{array}{r} 13 - 6 = 7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 6 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 6 \\ + 8 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 15 \\ - 6 \\ \hline 9 \end{array}$$

Usted Solo



$$\begin{array}{r} 14 - 4 = 10 \\ \hline \end{array}$$

$$\begin{array}{r} 14 - 10 = 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14 + 6 = 20 \\ \hline \end{array}$$

$$\begin{array}{r} 4 + 10 = 14 \\ \hline \end{array}$$

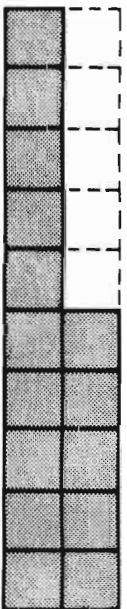
$$\begin{array}{r} 11 + 3 = 14 \\ \hline \end{array}$$

$$\begin{array}{r} 9 + 5 = 14 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 7 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 14 \\ - 5 \\ \hline 9 \end{array}$$



$$\begin{array}{r} 15 - 5 = 10 \\ \hline \end{array}$$

$$\begin{array}{r} 15 - 10 = 5 \\ \hline \end{array}$$

$$\begin{array}{r} 15 - 9 = 6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 + 5 = 20 \\ \hline \end{array}$$

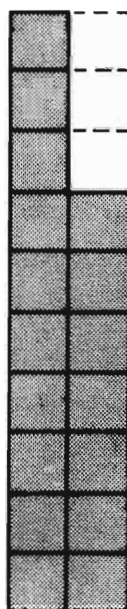
$$\begin{array}{r} 20 - 5 = 15 \\ \hline \end{array}$$

$$\begin{array}{r} 15 - 8 = 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 15 \\ - 3 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 12 \\ + 3 \\ \hline 15 \end{array}$$



$$\begin{array}{r} 17 - 6 = 11 \\ \hline \end{array}$$

$$\begin{array}{r} 17 - 10 = 7 \\ \hline \end{array}$$

$$\begin{array}{r} 17 - 7 = 10 \\ \hline \end{array}$$

$$\begin{array}{r} 17 - 8 = 9 \\ \hline \end{array}$$

$$\begin{array}{r} 20 - 3 = 17 \\ \hline \end{array}$$

$$\begin{array}{r} 8 + 9 = 17 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 7 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 11 \\ + 6 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 17 \\ - 3 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 9 + 6 = 15 \\ \hline \end{array}$$

$$\begin{array}{r} 6 + 7 = 13 \\ \hline \end{array}$$

$$\begin{array}{r} 8 + 7 = 15 \\ \hline \end{array}$$

$$\begin{array}{r} 14 - 6 = 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13 - 4 = 9 \\ \hline \end{array}$$

$$\begin{array}{r} 16 - 8 = 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 13 \\ - 6 \\ \hline 7 \end{array}$$



How do you feel?
¿Cómo se siente?

Dear Parent,

In this section, as in much of level B Individualized Computation, your child is continuing to develop skills in the four basic processes of arithmetic. Here there has been emphasis on recognizing combinations that make ten and in using this knowledge as a basis for "counting on."

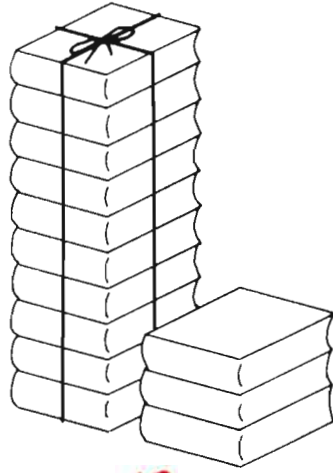
To avoid the tedium of always beginning with "one," your child (and every other child) is finally going to look for a shortcut. The easiest shortcut is recognizing tens and starting from there. The importance of this step can't be overstated. But we must not forget that each child will get there at a separate pace. We need to encourage, to offer assistance, but not to push. Experience with pennies and dimes is helpful, ten-sticks are helpful, fingers and toes are helpful.

Coming next is a series of exercises where your child can demonstrate readiness to count by tens. Success can be praised. Hesitation means that you can offer some friendly assistance with beansticks or other counters. Success now or a month or year from now means little in terms of overall growth in math.

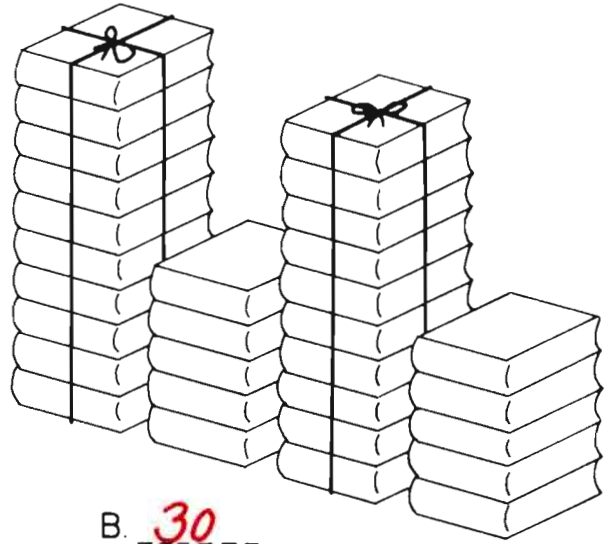
Sincerely,

This section offers good opportunity for counting on from ten and for counting by tens. See also: D.I. pp 45-59

How many books?
¿Cuántos libros hay?



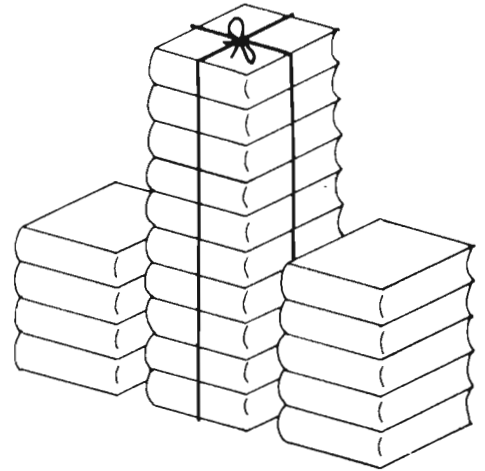
A. 13



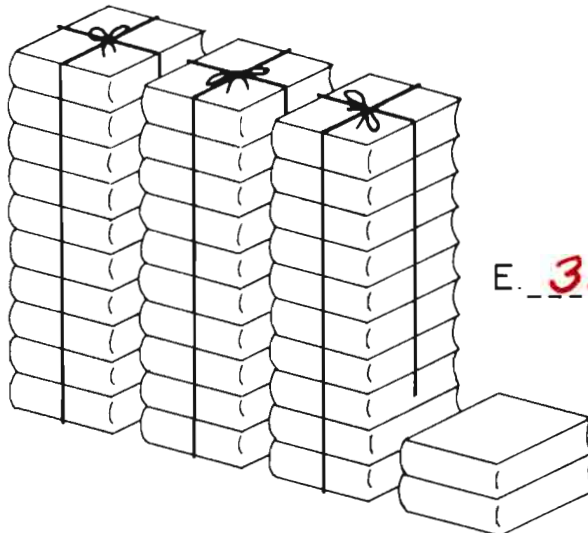
B. 30



C. 27



D. 19



E. 32

A. 13

B. 30

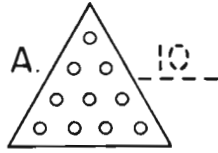
C. 27

D. 19

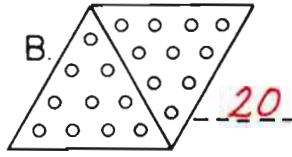
E. 32

The child is to discover how many marbles in each sketch.

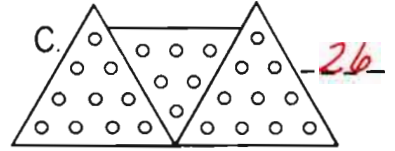
A. 10



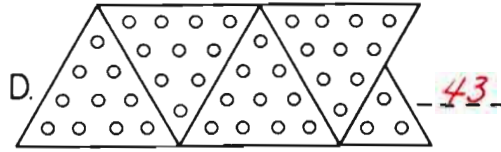
B.



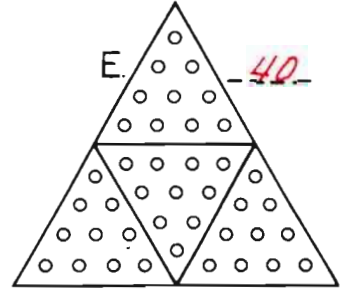
C. 26



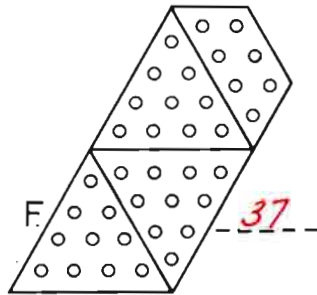
D. 43



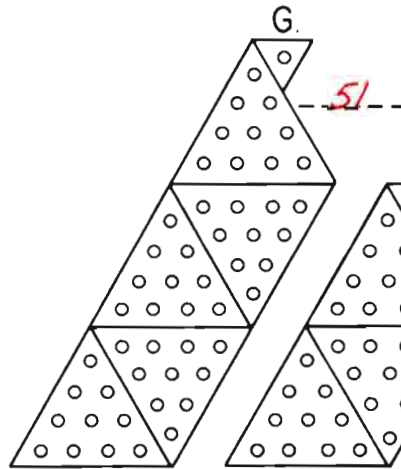
E.



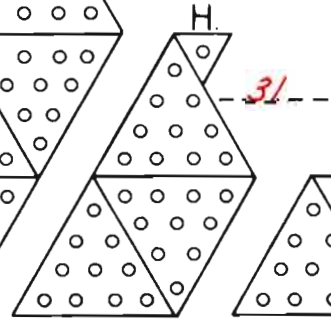
F.



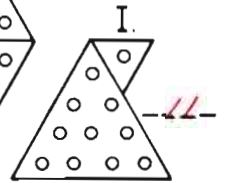
G. 51



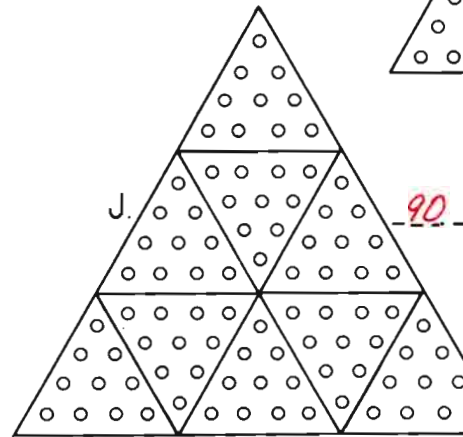
H.



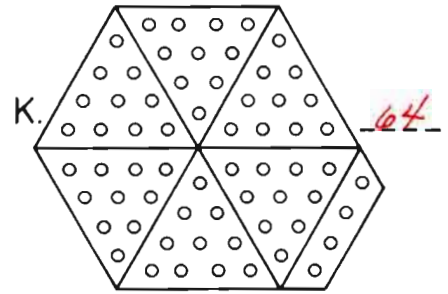
I.



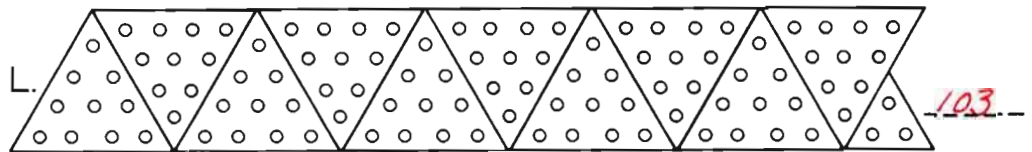
J. 90



K.



L. 103

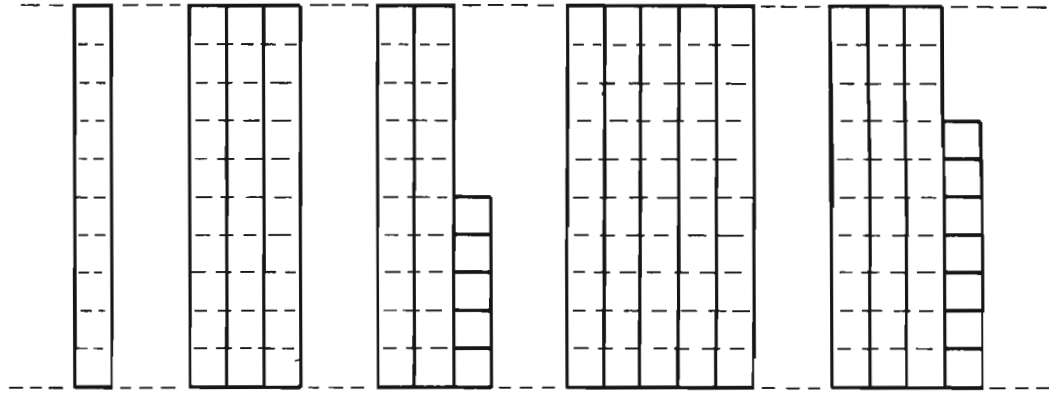


This might be a good point at which to let each child build a 100 bean raft.

A. 10

B. 30

C. 25



A. 10

B. 30

C. 25

D. 50

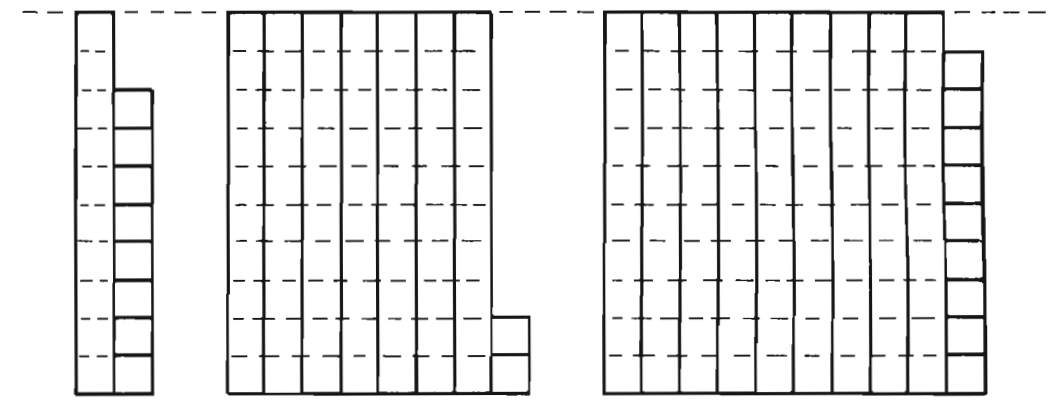
E. 37

D.

E. 37

F.

G.



F. 18

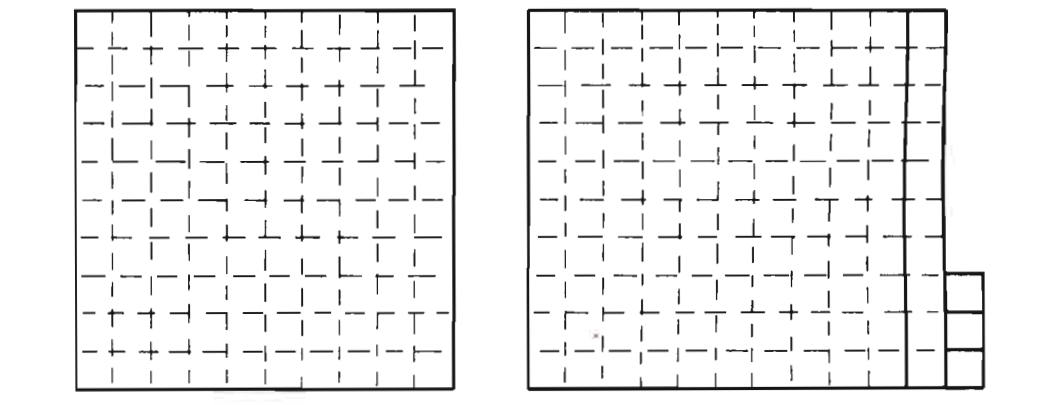
G. 72

H. 99

H. 99

I. 100

J.

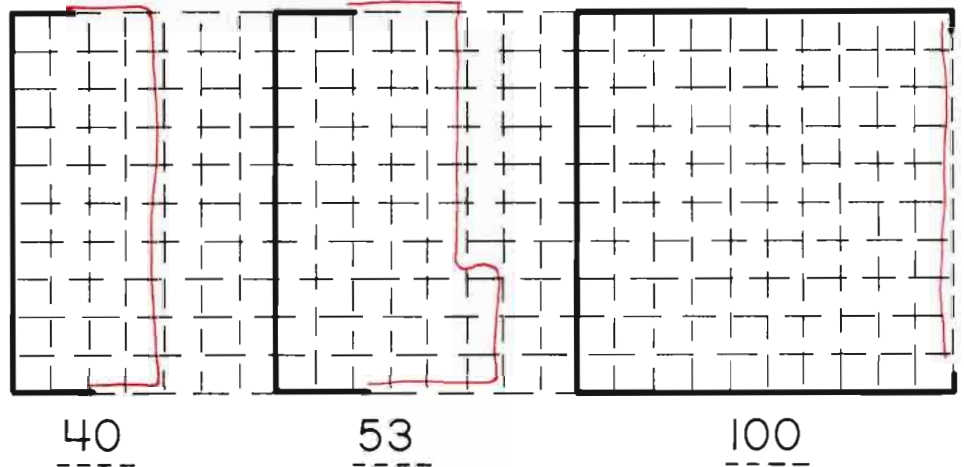
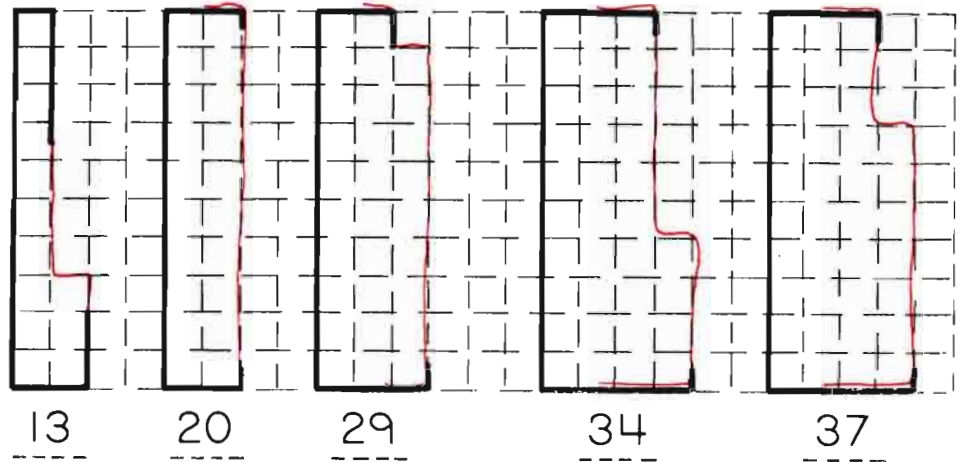
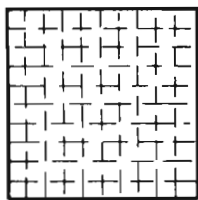
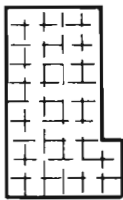
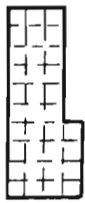
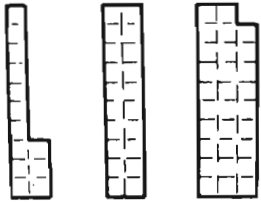


I. 100

J. 113

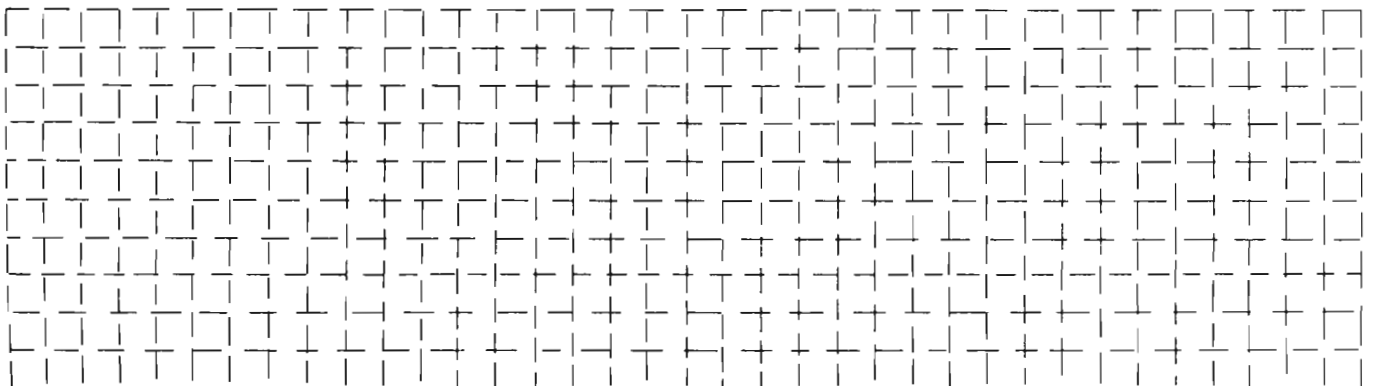
one way —

una manera —



Please draw a heavy line around as many blocks as you like, and write the number of blocks inside that line.

Favor de hacer una línea gruesa alrededor de cuantos cuadros usted quiera y escriba el número de cuadros dentro de la lí.



Real dimes and pennies laid over the drawings might aid some children.

A.

10¢
<u>1</u> <u>0</u>

B.

1¢
<u>0</u> <u>1</u>

C.

11¢
<u>1</u> <u>1</u>

D.

12¢
<u> </u> <u> </u>

E.

2	2
---	---

F.

23¢
<u> </u> <u> </u>

G.

3	0
---	---

H.

35¢
<u> </u> <u> </u>

A.

10¢

1 dime 0 pennies

B.

1¢

0 dices 1 centavo

C.

11¢

1 dime 1 penny

D.

12¢

1 diez 2 centavos

E.

22¢

2 dimes 2 pennies

F.

23¢

2 dices 3 centavos

G.

30¢

3 dimes 0 pennies

H.

35¢

3 dices 5 centavos

I.

57¢

5	7
---	---

J.

0	10
---	----

I.

57¢

5

 dimes 7 pennies

J.

10¢

0

 dices 10 centavos

K.

11

3	4
---	---

L.

3	4
---	---

K.

11

1

 10's 1 1's

L.

34

3

 10's 4 1's

M.

10

0	10
---	----

N.

0	10
---	----

M.

10

1

 10's 0 1's

N.

10

0

 10's 10 1's

O.

12¢

P.

O.

12¢

P.

12¢

 dimes pennies

 diez centavos

Q.

R.

12

Q.

12

R.

12

 10's 1's

 10's 1's

S.

100¢

T.

S.

100¢

 dimes pennies
 dieces centavos

T.

100

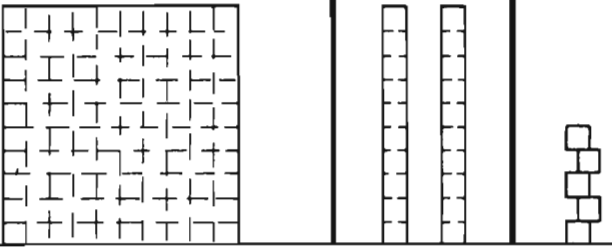
 10's 1's

U.

125

1 , 2 , 5

U.



125
total

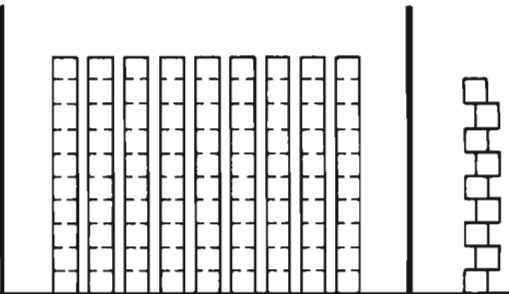
1 100's 2 10's 5 1's

V.

99

— , — , —

V.



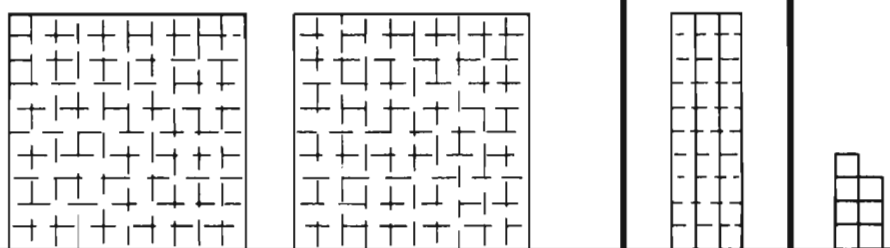
99
total

0 100's 9 10's 9 1's

W.

2 , 3 , 7

W.



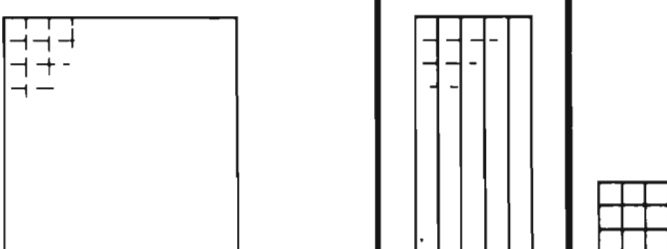
237
total

2 100's 3 10's 7 1's

X.

159

X.

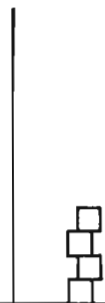
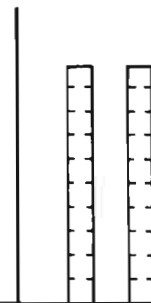
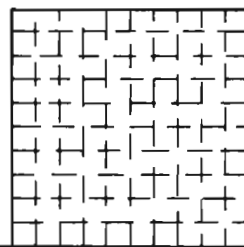
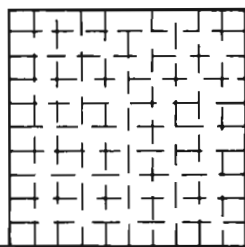
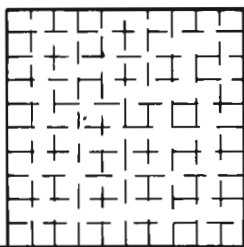


159
total

1 100's 5 10's 9 1's

On Your Own

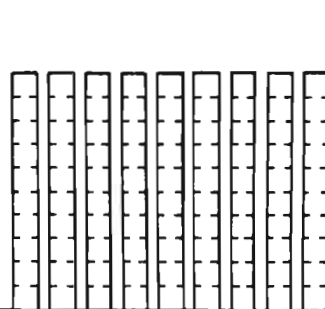
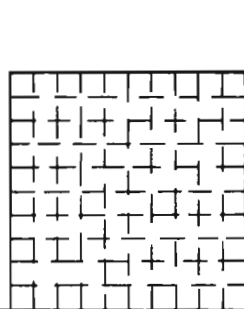
Usted Solo



324

total

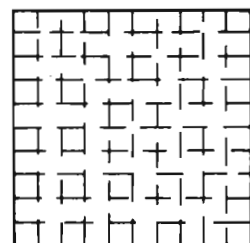
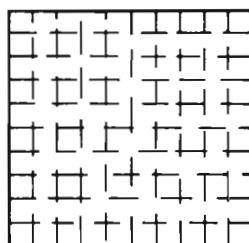
3 100's 2 10's 4 1's



199

total

1 100's 9 10's 9 1's



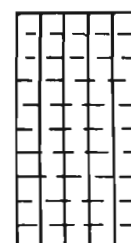
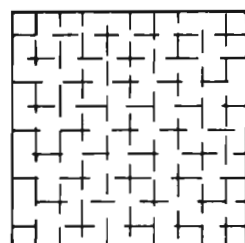
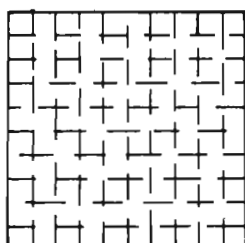
236

total

2 100's 3 10's 6 1's



How do you feel?
¿Cómo se siente?



259

total

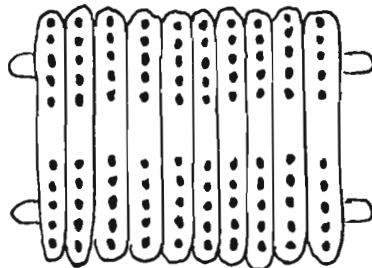
2 100's 5 10's 9 1's

Dear Parent,

As you can see from the progress test on the reverse of this letter, your child has become increasingly involved with "tens." You are very likely being requested to "Listen to me count by tens," "Hear how fast I can get to a hundred," and so on.

This is important progress. We hope you can take some time to listen, to praise and to be involved in your child's understanding of our decimal system. This section represents a first formal contact with units (ones), tens and hundreds as a logical system. Its not easy for many children but is extremely important.

At school, to help in understanding this system of "tens," we often make rafts of 100 beans. You can do this at home by making ten "ten-sticks" as described in a previous letter. Laid side by side the ten sticks can then be held together by glueing two popsicle sticks across the bottom of the tens.



Save your beansticks, rafts and loose beans. They'll be useful for a long time - even to eat in hard times!

Sincerely,

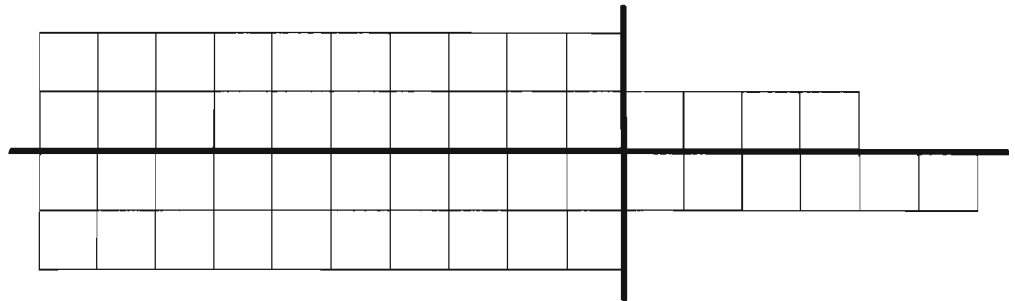
See also: D.I. pp 60-74

20	4
20	6

40	10
----	----

24
26

50



20	4
20	6

40	10
----	----

24
26

50

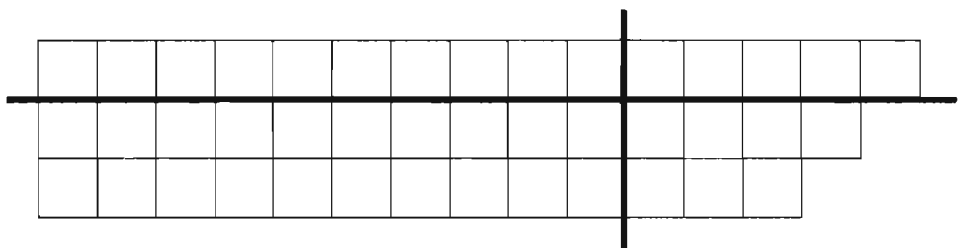
20	4	24
20	6	26
40	10	50

10	5
20	7

30	12
----	----

15
27

42



10	5
20	7

30	12
----	----

15
27

42

10	5	15
20	7	27
30	12	42

30	9
20	6

50	15
----	----

39

65

30	9
20	6

50	15
----	----

30	9	39
20		26
50		65

39
26

65

30	9	39
20	6	26
50	15	65

10	4
30	12

40	16
----	----

14
42

56

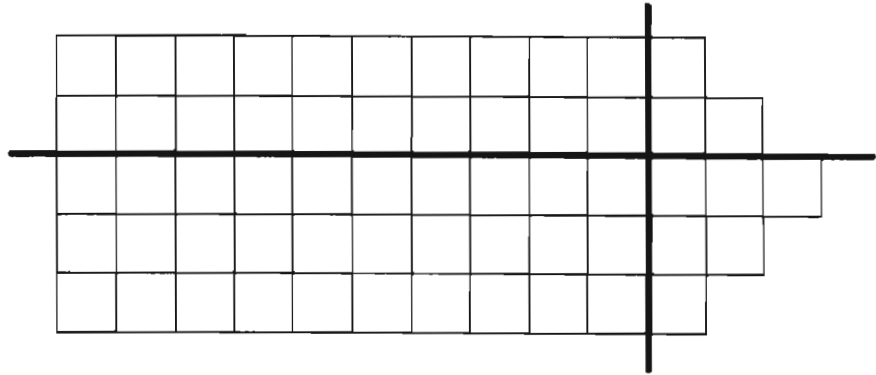
10	4	14
30	12	42
40	16	56

20	3
30	6

50	9
----	---

23
36

--



20	3
30	6

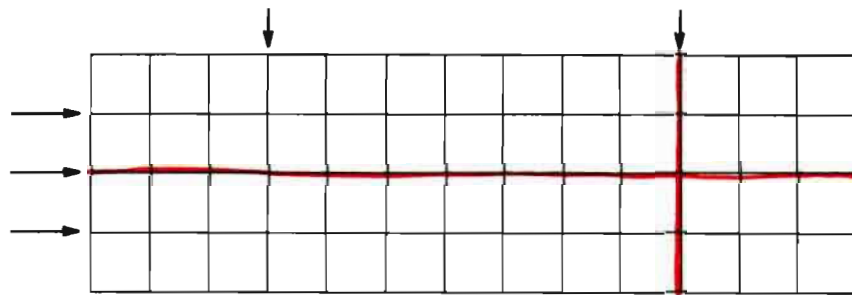
50	9
----	---

23
36

59

20	3	23
30	6	36
50	9	59

On Your Own
Usted Solo



20	6
20	6

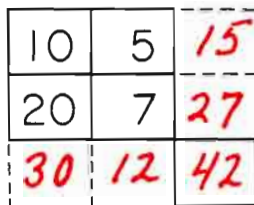
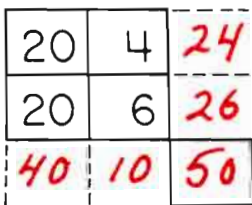
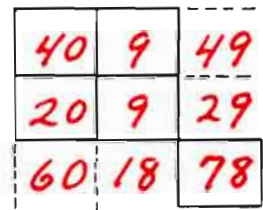
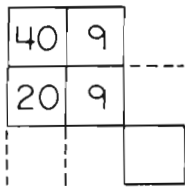
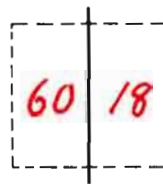
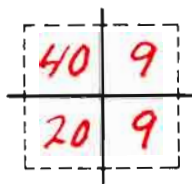
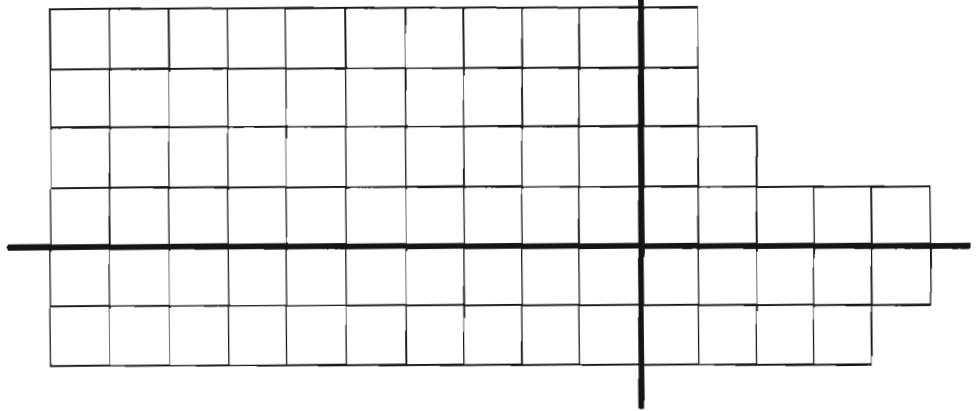
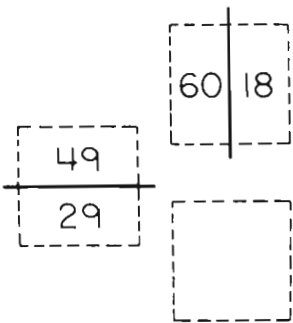
40	12
----	----

26
26

52

20	6	26
20	6	26
40	12	52

Use counters and beansticks if needed.



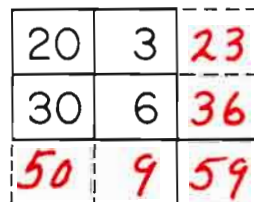
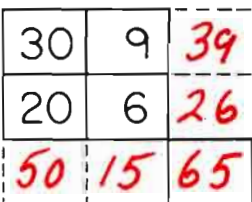
$$50 + 9 = \underline{59}$$

$$40 + 10 = \underline{50}$$

$$60 + 18 = \underline{78}$$

$$30 + 12 = \underline{42}$$

$$50 + 15 = \underline{65}$$



$$\begin{array}{r} 10 \\ +40 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 15 \\ +50 \\ \hline 65 \end{array}$$

$$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 60 \\ +18 \\ \hline 78 \end{array}$$

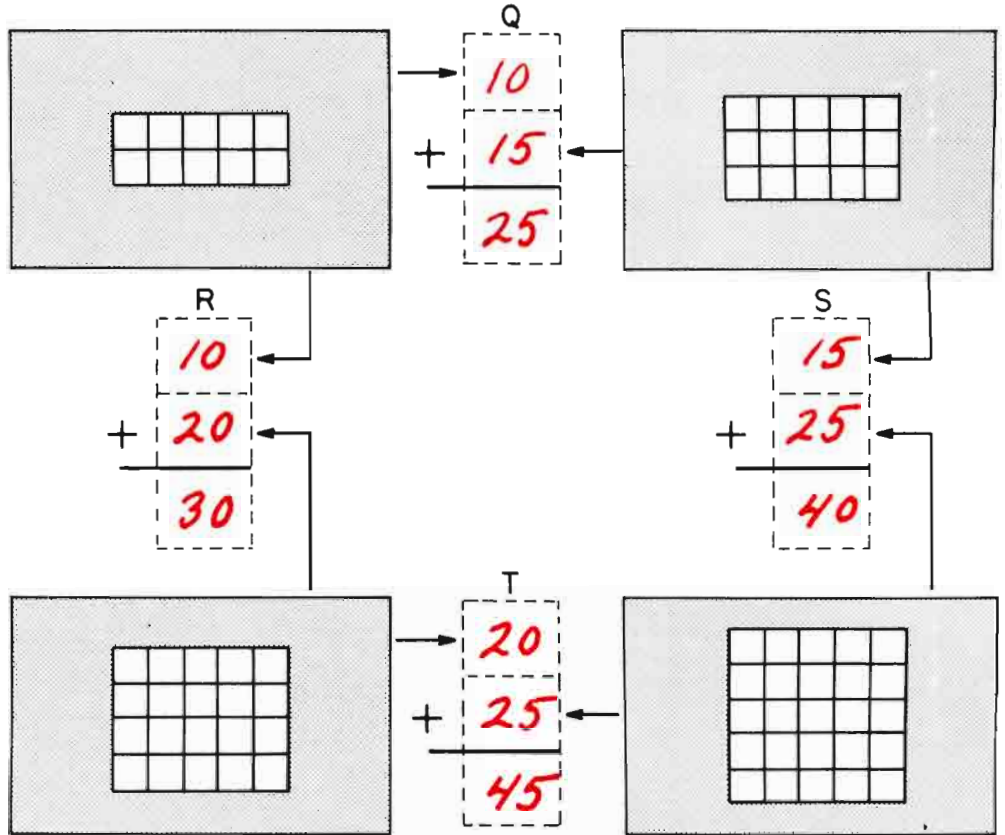
$$\begin{array}{r} 23 \\ +36 \\ \hline 59 \end{array}$$

$$\begin{array}{r} 29 \\ +49 \\ \hline 78 \end{array}$$

$$\begin{array}{r} \text{Q} \\ 10 \\ + 15 \\ \hline 25 \end{array}$$

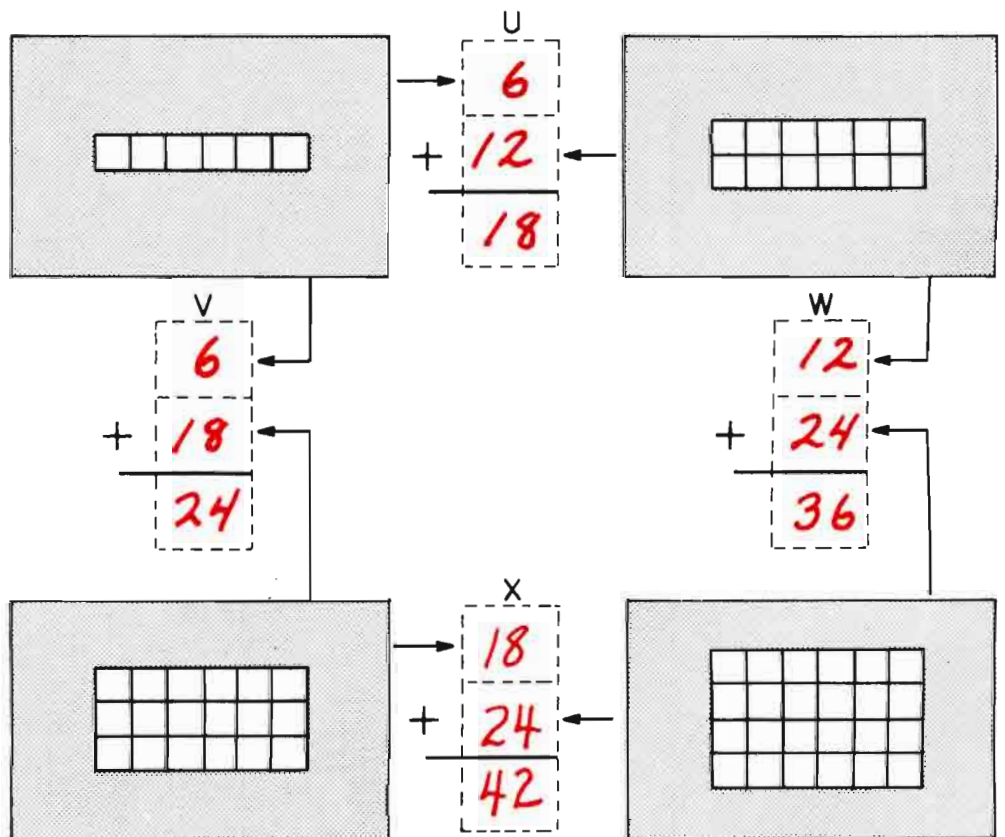
$$\begin{array}{r} \text{R} \\ 10 \\ + 20 \\ \hline 30 \end{array}$$

$$\begin{array}{r} \text{S} \\ 15 \\ + 25 \\ \hline 40 \end{array}$$

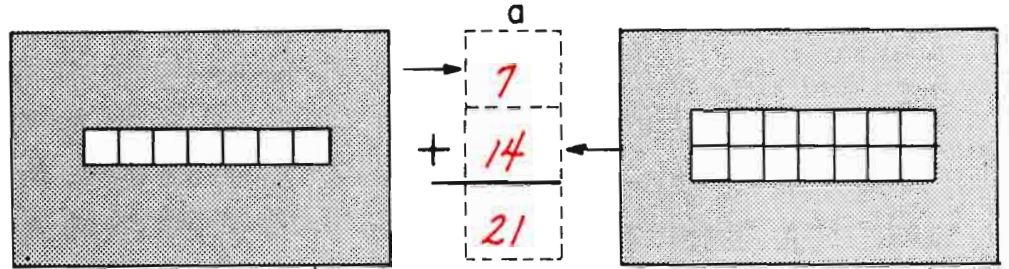


$$\begin{array}{r} \text{V} \\ 6 \\ + 18 \\ \hline 24 \end{array}$$

$$\begin{array}{r} \text{W} \\ 12 \\ + 24 \\ \hline 36 \end{array}$$

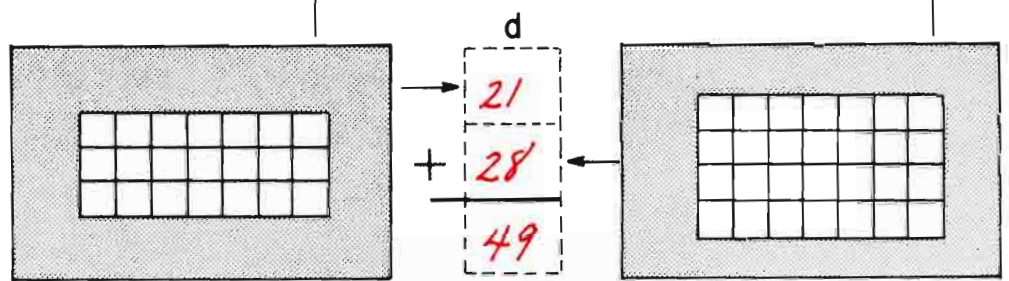


$$\begin{array}{r} \text{a} \\ \hline 7 \\ + 14 \\ \hline 21 \end{array}$$



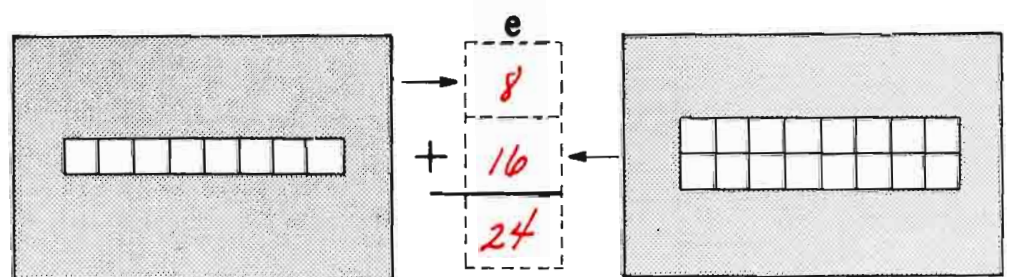
$$\begin{array}{r} \text{b} \\ \hline 7 \\ + 21 \\ \hline 28 \end{array}$$

$$\begin{array}{r} \text{c} \\ \hline 14 \\ + 28 \\ \hline 42 \end{array}$$



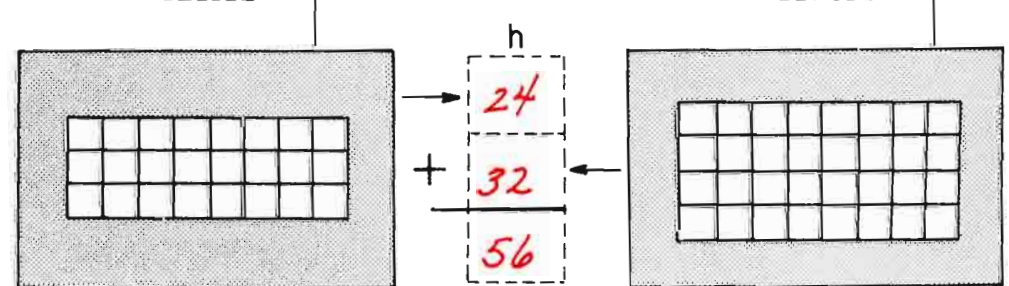
$$\begin{array}{r} \text{d} \\ \hline 21 \\ + 28 \\ \hline 49 \end{array}$$

$$\begin{array}{r} \text{e} \\ \hline 8 \\ + 16 \\ \hline 24 \end{array}$$



$$\begin{array}{r} \text{f} \\ \hline 8 \\ + 24 \\ \hline 32 \end{array}$$

$$\begin{array}{r} \text{g} \\ \hline 16 \\ + 32 \\ \hline 48 \end{array}$$



$$\begin{array}{r} \text{h} \\ \hline 8 \\ + 24 \\ \hline 32 \end{array}$$

If necessary children can shade squares for subtracting.
See also: D.I. pp 89-100

A

$$\begin{array}{r} 23 \\ + 3 \\ \hline 26 \end{array}$$

$$\begin{array}{r} 23 \\ - 3 \\ \hline 20 \end{array}$$

B

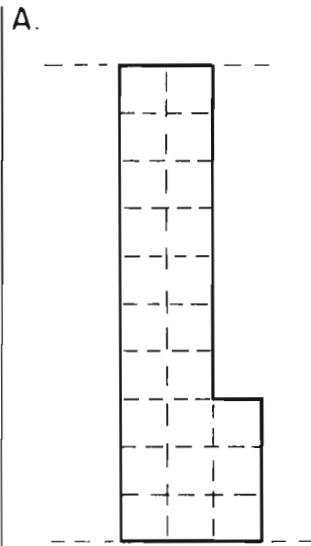
$$\begin{array}{r} 30 \\ + 2 \\ \hline 32 \end{array}$$

C

$$\begin{array}{r} 38 \\ + 3 \\ \hline 41 \end{array}$$

D

$$\begin{array}{r} 51 \\ - 3 \\ \hline 48 \end{array}$$

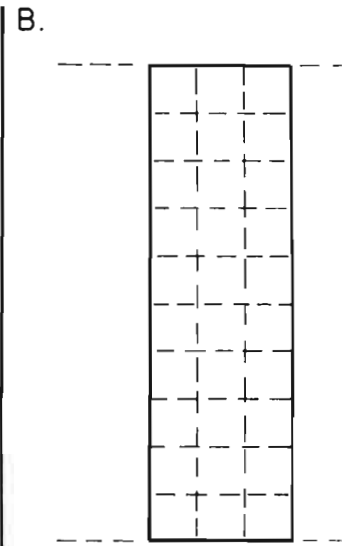


A →

$$\begin{array}{r} 23 \\ + 3 \\ \hline 26 \end{array}$$

A →

$$\begin{array}{r} 23 \\ - 3 \\ \hline 20 \end{array}$$

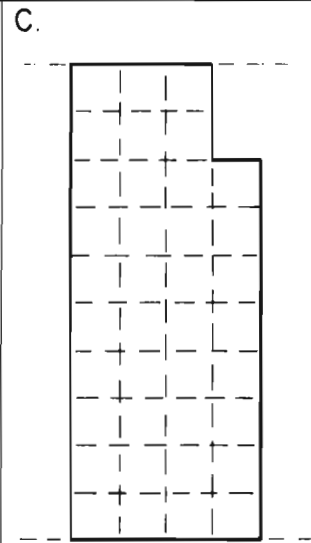


B →

$$\begin{array}{r} 30 \\ + 2 \\ \hline 32 \end{array}$$

B →

$$\begin{array}{r} 30 \\ - 2 \\ \hline 28 \end{array}$$

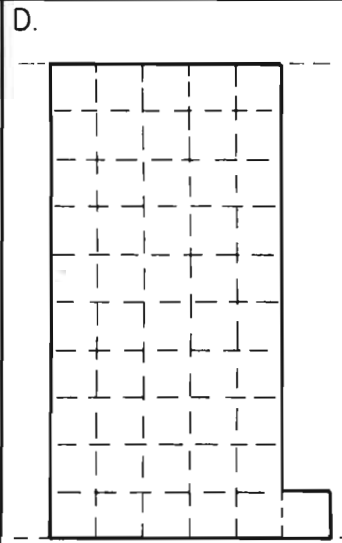


C →

$$\begin{array}{r} 38 \\ + 3 \\ \hline 41 \end{array}$$

C →

$$\begin{array}{r} 38 \\ - 8 \\ \hline 30 \end{array}$$



D →

$$\begin{array}{r} 51 \\ + 7 \\ \hline 58 \end{array}$$

D →

$$\begin{array}{r} 51 \\ - 3 \\ \hline 48 \end{array}$$

Please make up your own examples

E.

E →

$$\begin{array}{r} 35 \\ + \\ \hline \end{array}$$

E →

$$\begin{array}{r} 35 \\ - \\ \hline \end{array}$$

Favor de hacer sus propios ejemplos.

F.

F →

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

F →

$$\begin{array}{r} \\ - \\ \hline \end{array}$$

G.

$$\begin{array}{r} 28 \\ + 1 \\ \hline 29 \end{array}$$

H.

$$\begin{array}{r} 32 \\ - 3 \\ \hline 29 \end{array}$$

I.

$$\begin{array}{r} 40 \\ - 5 \\ \hline 35 \end{array}$$

J.

$$\begin{array}{r} 47 \\ + 10 \\ \hline 57 \end{array}$$

Please watch the signs
+ and -

G.

G → 28
+ 1
- 29
G → 28
+ 3
- 31

Favor de fijarse en los signos
+ y -

H.

H → 32
- 1
- 31
H → 32
- 3
- 29

I.

I → 40
+ 5
- 45
I → 40
- 5
- 35

J.

J → 47
+ 7
- 54
J → 47
+ 10
- 57

Please make up your own examples.

K.

K →

K →

Favor de hacer sus propios ejemplos.

L.

L →

L →

M.

$$\begin{array}{r} 36 \\ - 5 \\ \hline 31 \end{array}$$

N.

$$\begin{array}{r} 50 \\ - 10 \\ \hline \end{array}$$

O.

$$\begin{array}{r} 44 \\ + 13 \\ \hline 57 \end{array}$$

P.

$$\begin{array}{r} 39 \\ + 2 \\ \hline \end{array}$$

Please watch the signs.

M.

$$\begin{array}{r} 36 \\ - 5 \\ \hline 31 \end{array}$$

O.

$$\begin{array}{r} 44 \\ + 3 \\ \hline +7 \end{array}$$

Please make up your own examples.

Q.

Favor de fijarse en los signos.

N.

$$\begin{array}{r} 50 \\ + 10 \\ \hline 60 \end{array}$$

P.

$$\begin{array}{r} 39 \\ + 2 \\ \hline 41 \end{array}$$

Favor de hacer sus propios ejemplos.

R.

S.

$$\begin{array}{r} 29 \\ - 8 \\ \hline 21 \end{array}$$

T.

$$\begin{array}{r} 45 \\ + 5 \\ \hline 50 \end{array}$$

U.

$$\begin{array}{r} 26 \\ + 10 \\ \hline 36 \end{array}$$

V.

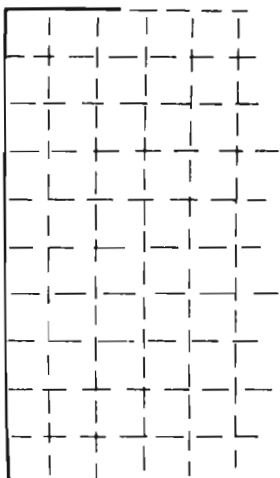
$$\begin{array}{r} 35 \\ - 9 \\ \hline 26 \end{array}$$

S.

T.

U.

V.



$$\begin{array}{r} 38 \\ - 8 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 38 \\ + 3 \\ \hline 41 \end{array}$$

$$\begin{array}{r} 47 \\ + 10 \\ \hline 57 \end{array}$$

$$\begin{array}{r} 50 \\ - 10 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 40 \\ + 5 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 40 \\ - 5 \\ \hline 35 \end{array}$$

$$\begin{array}{r} 44 \\ + 3 \\ \hline 47 \end{array}$$

$$\begin{array}{r} 44 \\ + 13 \\ \hline 57 \end{array}$$

$$\begin{array}{r} 35 \\ - 10 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 29 \\ - 18 \\ \hline 11 \end{array}$$

A.

$$\begin{array}{r} 19 \\ + 4 \\ \hline 23 \end{array}$$

B.

$$\begin{array}{r} 23 \\ - 15 \\ \hline 8 \end{array}$$

C.

$$\begin{array}{r} 30 \\ - 17 \\ \hline 13 \end{array}$$

D.

$$\begin{array}{r} 35 \\ + 15 \\ \hline 50 \end{array}$$

A.

A.

$$\begin{array}{r} 19 \\ + 14 \\ \hline 33 \end{array}$$

B.

B.

$$\begin{array}{r} 23 \\ - 15 \\ \hline 8 \end{array}$$

C.

C.

$$\begin{array}{r} 30 \\ - 17 \\ \hline 13 \end{array}$$

D.

D.

$$\begin{array}{r} 35 \\ + 15 \\ \hline 50 \end{array}$$

Please make up your own examples.

Favor de hacer sus propios ejemplos.

E.

F.

G.

$$\begin{array}{r} 31 \\ -10 \\ \hline 21 \end{array}$$

H.

$$\begin{array}{r} 14 \\ +26 \\ \hline 40 \end{array}$$

G.

H.

I.

$$\begin{array}{r} 40 \\ -29 \\ \hline 11 \end{array}$$

J.

I.

J.

Please make up your own examples.

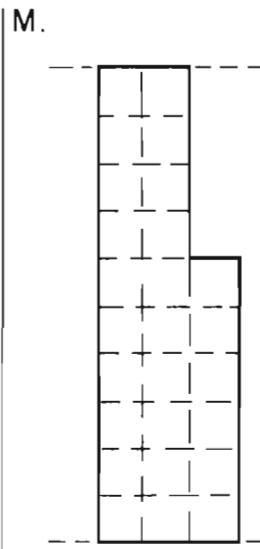
Favor de hacer sus propios ejemplos.

K.

L.

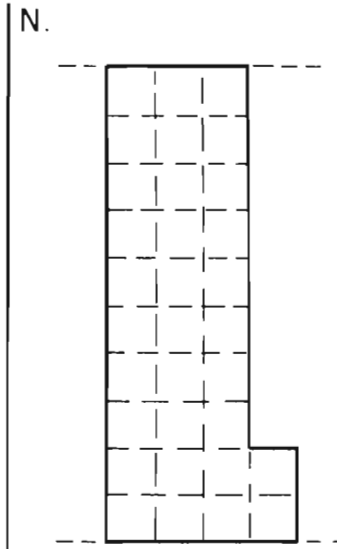
$$\begin{array}{r} \text{M.} \\ 26 \\ + 5 \\ \hline 31 \end{array}$$

$$\begin{array}{r} \text{N.} \\ 32 \\ - 2 \\ \hline 30 \end{array}$$



$$\begin{array}{r} \text{M.} \rightarrow \\ 26 \\ + 5 \\ \hline 31 \end{array}$$

$$\begin{array}{r} 26 \\ + 15 \\ \hline 41 \end{array}$$

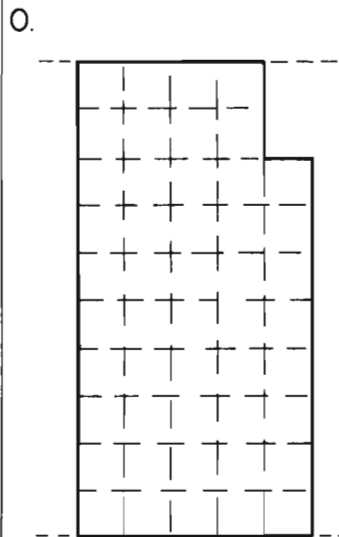


$$\begin{array}{r} 32 \\ - 2 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 32 \\ - 12 \\ \hline 20 \end{array}$$

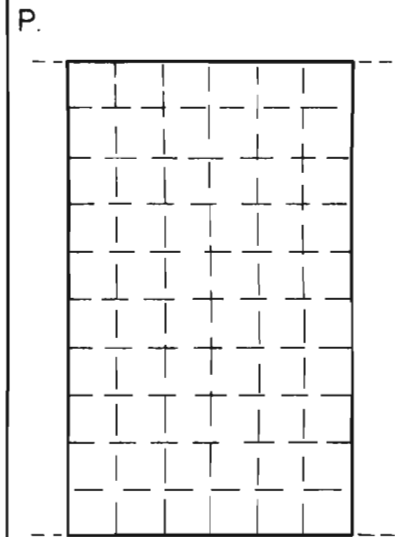
$$\begin{array}{r} \text{O.} \\ 48 \\ + 10 \\ \hline 58 \end{array}$$

$$\begin{array}{r} \text{P.} \\ 60 \\ + 20 \\ \hline 80 \end{array}$$



$$\begin{array}{r} 48 \\ + 10 \\ \hline 58 \end{array}$$

$$\begin{array}{r} 48 \\ + 13 \\ \hline 61 \end{array}$$

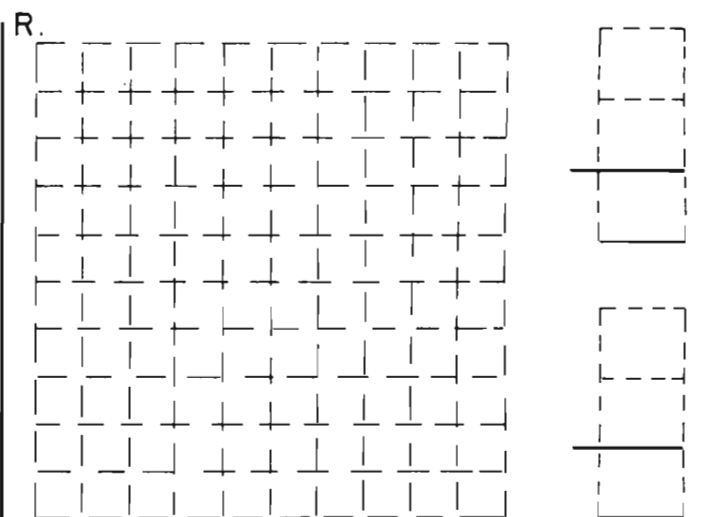
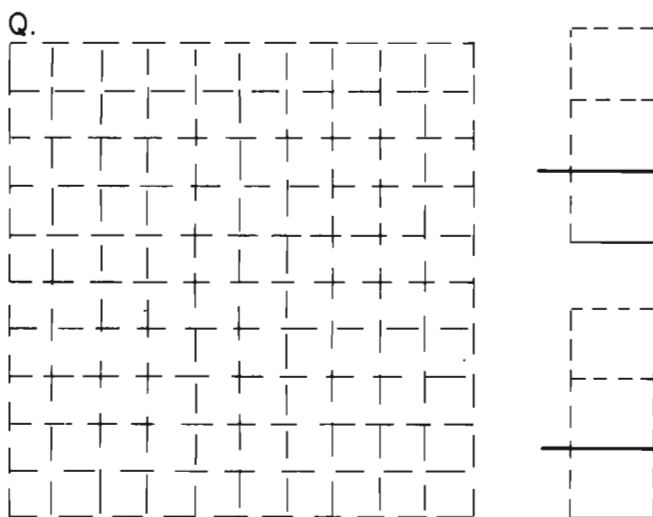


$$\begin{array}{r} 60 \\ + 20 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 60 \\ - 50 \\ \hline 10 \end{array}$$

Please make up your own examples.

Favor de hacer sus propios ejemplos.



$$\begin{array}{r} S. \\ + 46 \\ + 4 \\ \hline 50 \end{array}$$

$$\begin{array}{r} T. \\ + 47 \\ + 5 \\ \hline 52 \end{array}$$

$$\begin{array}{r} U. \\ - 48 \\ - 9 \\ \hline 39 \end{array}$$

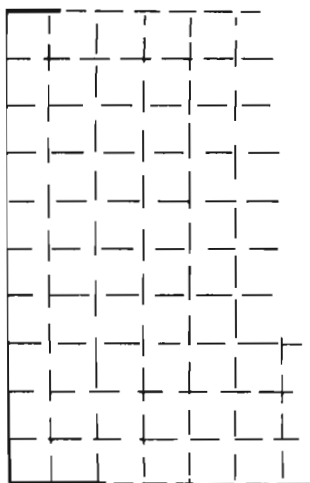
$$\begin{array}{r} V. \\ + 49 \\ + 11 \\ \hline 60 \end{array}$$

S.

T.

U.

V.



$$\begin{array}{r} 19 \\ + 4 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 30 \\ - 7 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 35 \\ + 10 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 31 \\ - 10 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 47 \\ + 5 \\ \hline 52 \end{array}$$

$$\begin{array}{r} 13 \\ + 6 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 23 \\ - 5 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 60 \\ - 50 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 48 \\ + 13 \\ \hline 61 \end{array}$$

$$\begin{array}{r} 40 \\ - 29 \\ \hline 11 \end{array}$$

On Your Own
Usted Solo

$$\begin{array}{r} 46 \\ + 4 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 46 \\ - 6 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 47 \\ + 5 \\ \hline 52 \end{array}$$

$$\begin{array}{r} 47 \\ - 4 \\ \hline 43 \end{array}$$

$$\begin{array}{r} 30 \\ - 7 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 48 \\ + 9 \\ \hline 57 \end{array}$$

$$\begin{array}{r} 48 \\ - 9 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 49 \\ + 11 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 49 \\ - 30 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 31 \\ - 10 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 60 \\ + 20 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 60 \\ - 50 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 35 \\ + 10 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 35 \\ + 15 \\ \hline 50 \end{array}$$


How do you feel?
¿Cómo se siente?

Dear Parent,

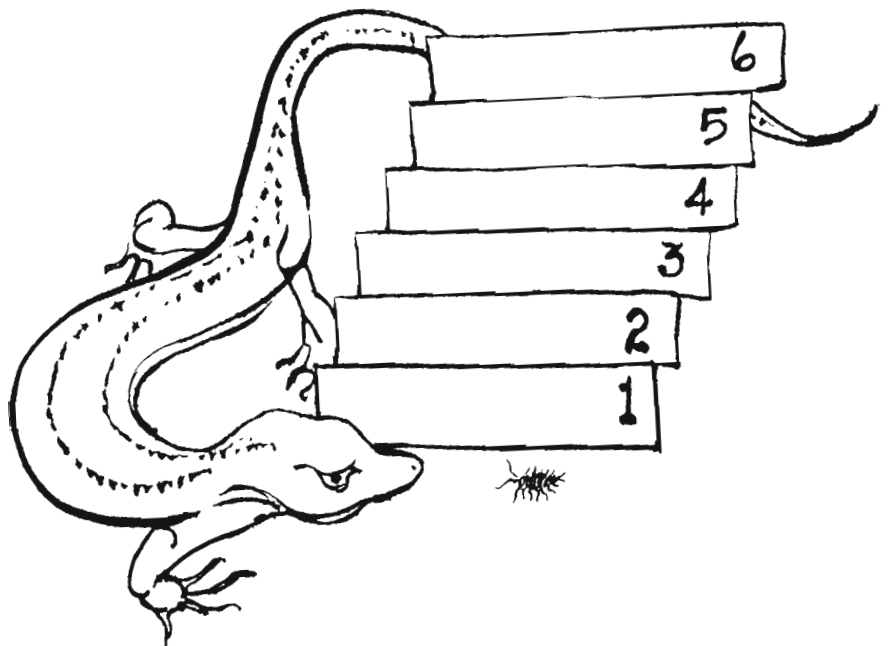
When I look at all the material we've covered in this book it makes my head swim a little, and it makes me pause. It makes me stop and wonder again how all of us, you, your child and I, are feeling about math; especially how your child is feeling. And it makes me realize again how vital these feelings are. So let's re-examine.

An important goal of CDA math is "friendliness with numbers." If a child feels good about numbers, feels confident in using them, feels comfortable in talking about them, then that child is going to perform well in math. And that performance will include practical, daily use of numbers as well as success in achievement tests. CDA experience has shown that effective arithmetic learning works that way.

So if your child still wants to use counters, beansticks, or any other "real things" for working math problems, that's great. Keep those "things" handy and let the child decide when to put them aside. If your child is happy to work now with just pictures of objects or just numbers, then that's fine also. Each child follows a different path and we try to allow for that.

Completing this book is a major sort of triumph for your child. I've tried to communicate that and I'm sure you will, too.

Sincerely,



this
book
belongs
to

este
libro
es de

