

answers &
annotations

Individualized Computation

C₁





Cover Art
The First/Second grade class of Elaine Greene at
River School.

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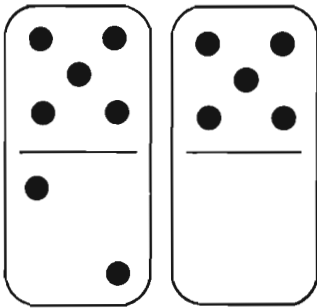
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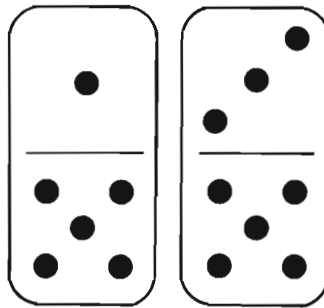
How Many Spots?

¿Cuántos Puntos?



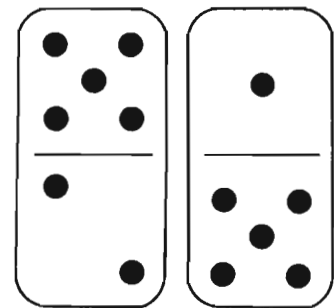
$$\underline{7 + 5 = 12}$$

A.



$$\underline{6 + 8 = 14}$$

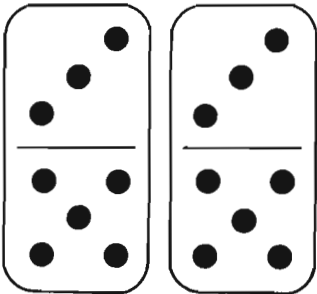
B.



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

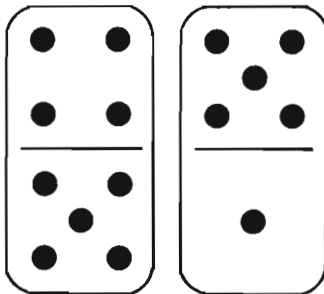
C.

See also the first part of C/ Patterns and Problems



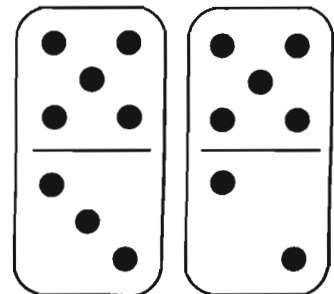
$$\underline{8 + 8 = 16}$$

D.



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

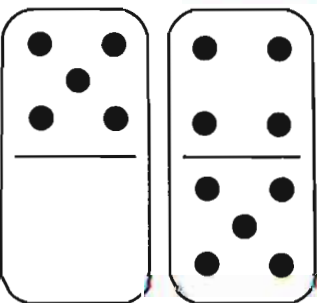
E.



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

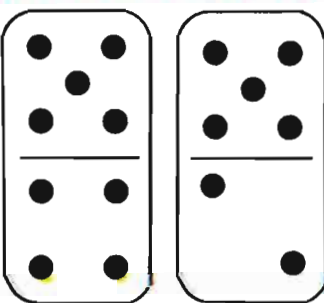
F.

The answer for "D" is one of the numbers under "D" in the answer box. You might wish to remind students that not all answers are given.



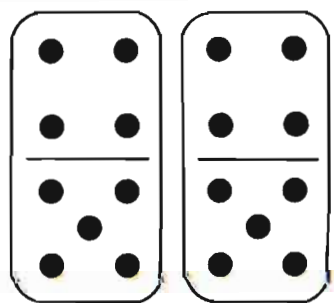
$$\underline{5 + 9 = 14}$$

G.



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

H.



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

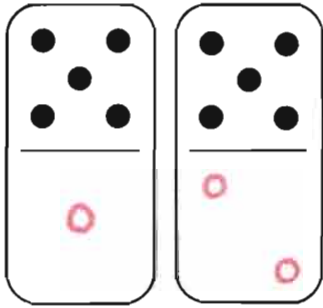
I.

See also: D&P 61-66
85-93

A.	B.	C.	D.	E.	F.	G.	H.	I.
12	14	13	9	15	12	10	17	18
			16	13	15	12	16	20
						14	14	17

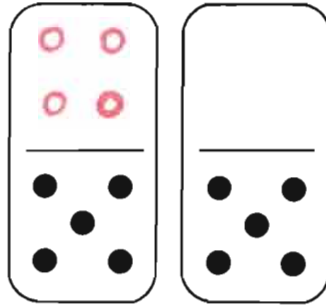
Please fill in the missing spots.

Favor de llenar los puntos que faltan.



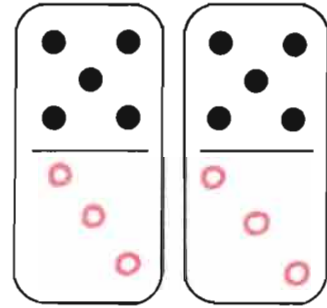
$$\underline{6 + 7 = 13}$$

A.



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

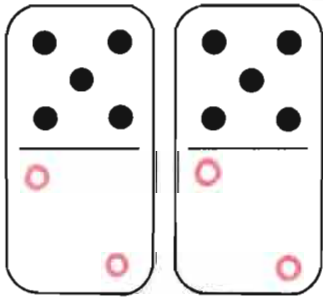
B.



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

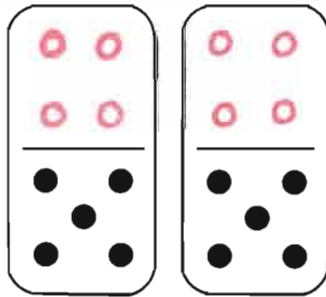
C.

You might want to point out to children that not all answers are given.



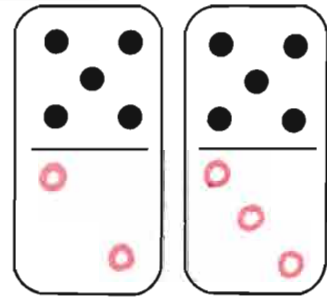
$$\underline{7 + 7 = 14}$$

D.



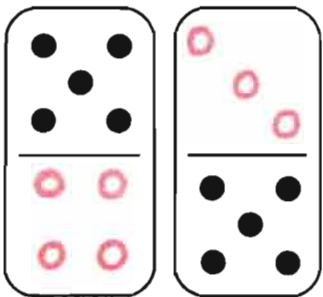
$$\underline{9 + 9 = 18}$$

E.



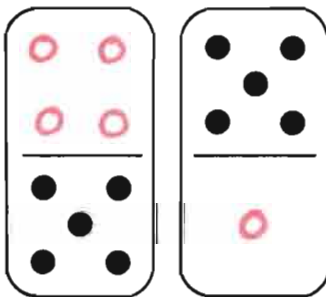
$$\underline{7 + 8 = 15}$$

F.



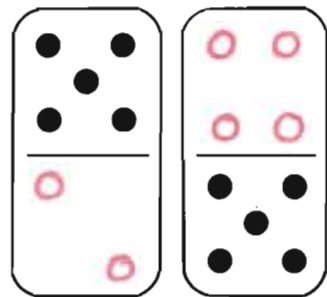
$$\underline{9 + 8 = 17}$$

G.



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

H.



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

I.

A.	B.	C.	D.	E.	F.	G.	H.	I.
13	14	16	14	19	14	18	15	17
			13	18	15	17	13	19
						16	11	16

Please fill in the missing spots and add both ways.

$10 + 4 = 14$ A.

Favor de llenar los puntos que faltan y sume en las dos direcciones.

$7 + 8 = 15$ B.

$10 + 6 = 16$ C.

$8 + 10 = 18$ D.

$8 + 8 = 16$ E.

$10 + 9 = 19$ F.

A.	B.	C.	D.	E.	F.
14	15	16	17	18	14
		15	18	16	10
				14	19

Please fill in the missing spots and add both ways.

$9 + 6 = 15$ A.

Favor de llenar los puntos que faltan y sume en las dos direcciones.

$7 + 8 = 15$ B.

$10 + 8 = 18$ C.

$4 + 10 = 14$ D.

$8 + 9 = 17$ E.

$10 + 6 = 16$ F.

A.	B.	C.	D.	E.	F.
15	15	18	15	9	16
		9	14	11	10
				17	9

How Many Beans?

¿Cuántos Frijoles Hay?

Related Examples

Ejemplos relacionados

Two beansticks are shown. The top one has 7 beans, and the bottom one has 6 beans. To the right is a math problem:
$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

A.

The children might make some beansticks with this kind of grouping

Two beansticks are shown. The top one has 5 beans, and the bottom one has 9 beans. To the right is a math problem:
$$\begin{array}{r} 5 \\ + 9 \\ \hline 14 \end{array}$$

B.

Sometimes you will need to draw in some beans.

Algunas veces va a necesitar dibujar algunos frijoles.

They are very useful for illustrating the counting shortcut of looking for combinations that make 10 and then "counting-on" from 10.

Two beansticks are shown. The top one has 6 beans and one red circle. The bottom one has 8 beans and three red circles. To the right is a math problem:
$$\begin{array}{r} 6 \\ + 8 \\ \hline 14 \end{array}$$

See also: D&P 40-42
85-87

C.

Two beansticks are shown. The top one has 9 beans and three red circles. The bottom one has 6 beans and one red circle. To the right is a math problem:
$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$$

D.

Many teachers have found peer instruction a tremendous asset in the Individualized Computation program. A student who has just mastered an activity is an excellent teacher. More discussion of peer teaching in Math for Everyone.

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

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

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

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

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

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

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

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

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

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

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

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

A.	B.	C.	D.
12	14	16	17
13	15	14	15

How Many Beans?

¿Cuántos Frijoles Hay?

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

A.

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

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

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

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

B.

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

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

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

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

C.

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

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

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

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

D.

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

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

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

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

E.

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

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

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

A.	B.	C.	D.	E.
13	14	14	15	12

Please add the missing beans.

Favor de agregar los frijoles que faltan.

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

A.

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

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

B.

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

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

C.

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

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

D.

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

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

E.

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

A.	B.	C.	D.	E.
14	16	15	15	13
		16	17	14

Please add the missing beans.

Favor de agregar los frijoles que faltan.

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

A.

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

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

B.

$$\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array} \quad \begin{array}{r} 12 \\ - 5 \\ \hline 7 \end{array} \quad \begin{array}{r} 12 \\ - 7 \\ \hline 5 \end{array}$$

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

C.

$$\begin{array}{r} 8 \\ + 9 \\ \hline 17 \end{array} \quad \begin{array}{r} 18 \\ - 9 \\ \hline 9 \end{array} \quad \begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array}$$

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

D.

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

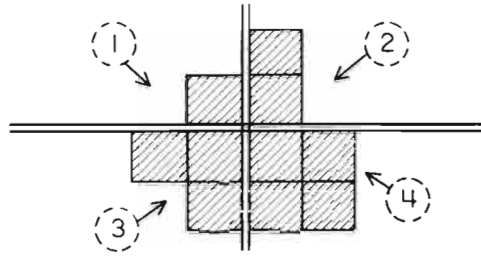
$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$$

E.

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

A.	B.	C.	D.	E.
17	14	18	12	15
16	12	17	15	18

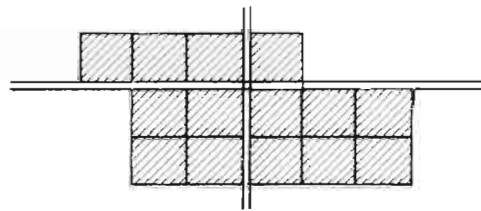
1	2	3
3	4	7
4	6	10



1	2	3
3	4	7
4	6	10

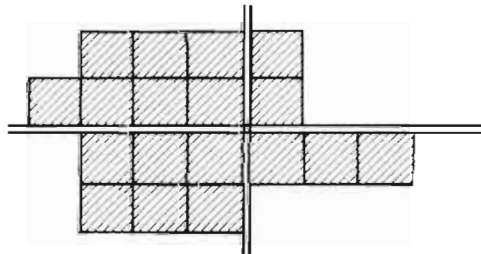
See also: D&P 107-109

3	1	4
4	6	10
7		14



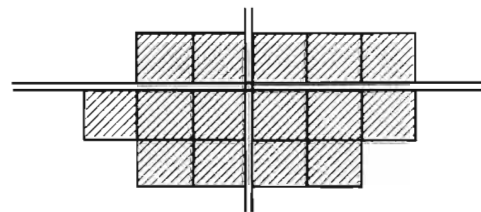
3	1	4
4	6	10
7	7	14

7	2	9
6	3	9
13	5	



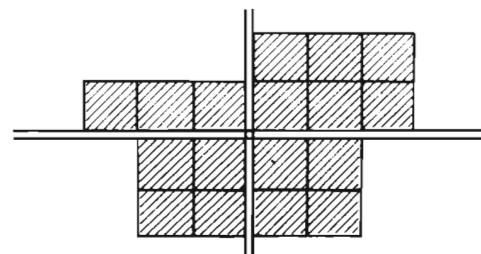
7	2	9
6	3	9
13	5	18

2		5
		10
7	8	



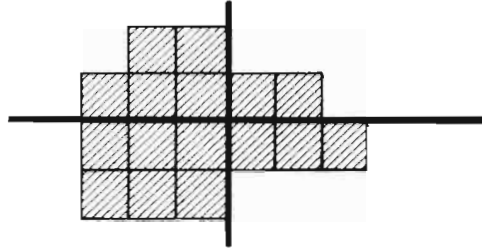
2	3	5
5	5	10
7	8	15

3	6	9
4	4	8



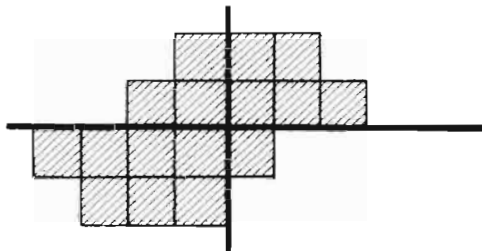
3	6	9
4	4	8
7	10	17

5	2	7
6	3	9
11	5	16



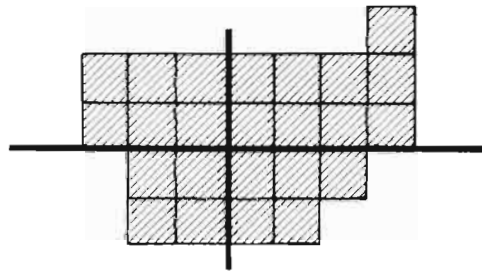
5	2	7
6	3	9
11	5	16

3	5	8
7	1	8
10	6	16



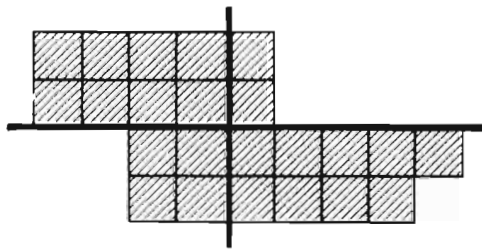
3	5	8
7	1	8
10	6	16

6	9	15
4	5	9
10	14	



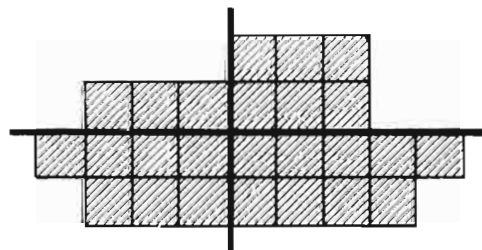
6	9	15
4	5	9
10	14	24

8		10
4	9	13
12	11	



8	2	10
4	9	13
12	11	23

3		9
	9	
10	15	



3	6	9
7	9	16
10	15	25

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

+	1	2	3
	3	4	7
	4	6	10

+	1	3	4
	4	2	6
	5	5	10

+	7	5	12
	3	1	4
	10	6	16

+	2	4	6
	2	5	7
	4	9	13

+	6	3	9
	8	1	9
	14	4	18

+	5	2	7
	3	6	9
	8	8	16

+	8	3	11
	1	3	4
	9	6	15

+	2	3	5
	7	5	12
	9	8	17

+	3	5	8
	3	4	7
	6	9	15

Periodic progress tests are indicated by a face and "how do you feel?" The child can react by completing the face as happy, sad, angry etc.

+	4	1	5
	4	5	9
	8	6	14

+	7	3	10
	1	9	10
	8	12	20

+	7	2	9
	5	4	9
	12	6	18

+	5	3	8
	1	8	9
	6	11	17

+	3	4	7
	6	1	7
	9	5	14



How do you feel.
¿Cómo se siente?

Dear Parents,

In each of the primary level CDA computation books there is a series of letters like this which you will receive as your child completes each "check-up" exercise throughout the books. We'll discuss the kind of development being made and enjoyable ways you can help at home.

The beginning of this book deals with basic addition and subtraction, which is review, but in a new and interesting form. Looking at the exercise on the back of this page you can see that each group has 6 addition operations to be performed - that's a lot of "old-fashioned" drill in a small space! And this different format also shows the oftentimes "surprise" result that the vertical sums and horizontal sums add up to the same number in the bottom right hand corner. We all know that regardless of the order in which we add 4 numbers, we come up with the same answer ($1+2+3+4=10$ just as $4+2+1+3=10$) but in this set-up it's still somewhat of a surprise:

1	2	3
3	4	7
4	6	10

You can discuss this with your child. Will that interesting result always work for addition? And for subtraction? - that comes next!

We encourage you to use counters or draw picture representations when your child expresses the need. As confidence with what numbers represent in the "real" world becomes firm, these aids will no longer be necessary. You'll notice throughout the CDA books that new activities are always introduced with sketches (or manipulative ideas). This way children can "see" what the arithmetic symbols are recording about experiments in the real world.

Thanks for your help! Your support and friendly encouragement is so important for your child's success!

Sincerely,

How Many Left?

¿Cuántos Quedan?

Related examples

Ejemplos relacionados



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

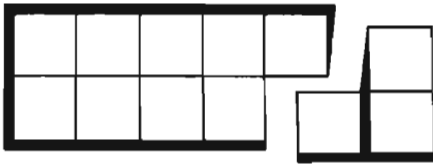
$$\begin{array}{r} 13 \\ - 7 \\ \hline 6 \end{array}$$

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

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

A.

See also: D&P 85-93
136-138



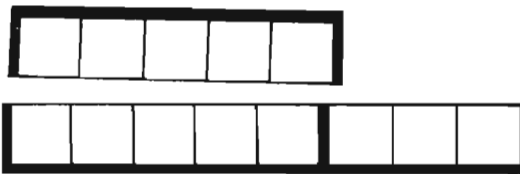
$$\begin{array}{r} 12 \\ - 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 12 \\ - 9 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 3 \\ + 9 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array}$$

B.



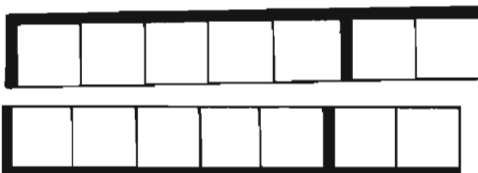
$$\begin{array}{r} 13 \\ - 8 \\ \hline 5 \end{array}$$

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

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

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

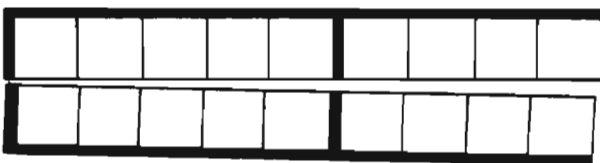
C.



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

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

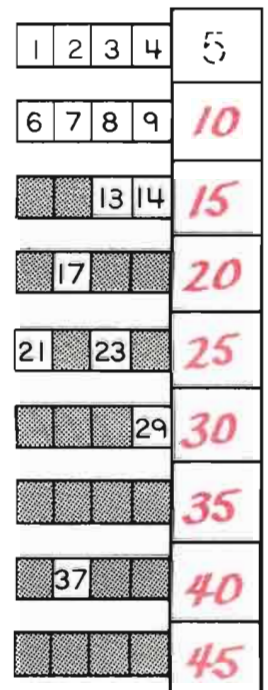
D.



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

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

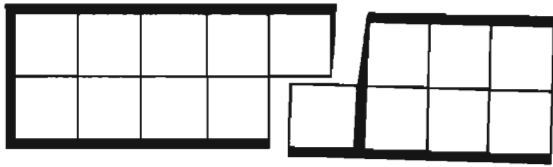
E.



A.	B.	C.	D.	E.
7	9	3	7	8
8	10	5	10	9

How Many Left?

¿Cuántos Quedan?



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

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

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

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

A.



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

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

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

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

B.



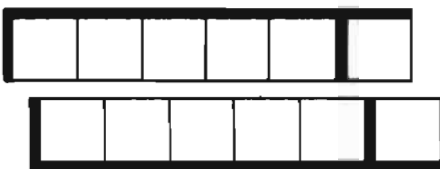
$$\begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array}$$

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

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

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

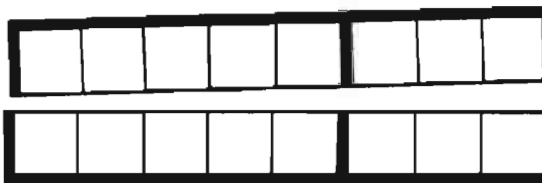
C.



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

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

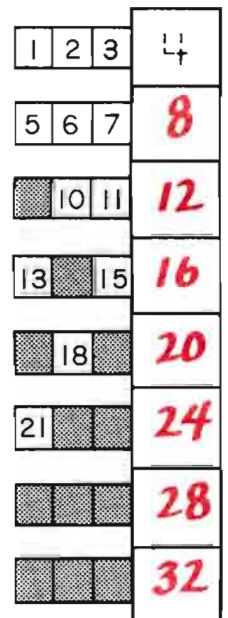
D.



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

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

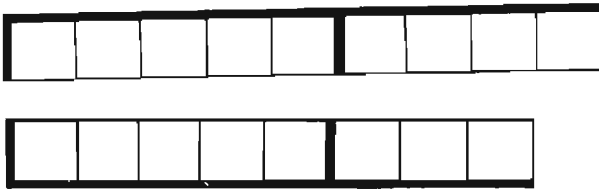
E.



A.	B.	C.	D.	E.
8	6	9	5	8
9	8	7	6	9

How Many Left?

¿Cuántos quedan?



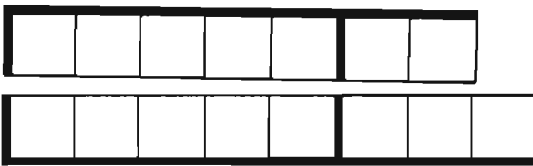
$$\begin{array}{r} 17 \\ - 8 \\ \hline 9 \end{array}$$

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

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

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

A.



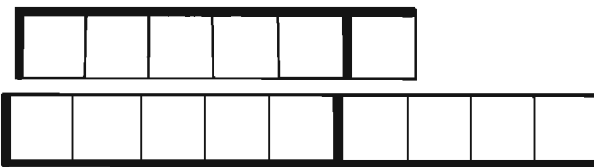
$$\begin{array}{r} 15 \\ - 8 \\ \hline 7 \end{array}$$

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

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

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

B.



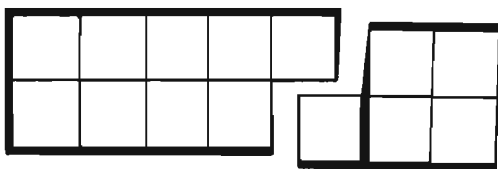
$$\begin{array}{r} 15 \\ - 9 \\ \hline 6 \end{array}$$

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

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

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

C.



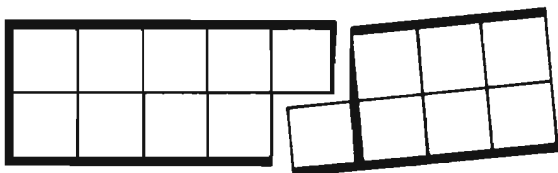
$$\begin{array}{r} 14 \\ - 5 \\ \hline 9 \end{array}$$

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

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

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

D.



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

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

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

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

E.

A.	B.	C.	D.	E.
9	8	8	9	7
8	7	6	5	9

Please fill in the missing numbers as fast as you can. Practice those that slow you down.

Favor de llenar los números que faltan lo más pronto posible. Practique con los que no sabe muy bien.

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 10 & 3 & 7 \\ \hline 6 & 1 & 5 \\ \hline 4 & 2 & 2 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 11 & 7 & 4 \\ \hline 6 & 3 & 3 \\ \hline 5 & 4 & 1 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 12 & 3 & 9 \\ \hline 8 & 3 & 5 \\ \hline 4 & 0 & 4 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 13 & 4 & 9 \\ \hline 6 & 2 & 4 \\ \hline 1 & 2 & 5 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 14 & 5 & 9 \\ \hline 8 & 2 & 6 \\ \hline 6 & 3 & 3 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 15 & 7 & 8 \\ \hline 9 & 4 & 5 \\ \hline 6 & 3 & 3 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 16 & 7 & 9 \\ \hline 8 & 6 & 2 \\ \hline 8 & 1 & 7 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 17 & 7 & 10 \\ \hline 8 & 3 & 5 \\ \hline 9 & 4 & 5 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 18 & 8 & 10 \\ \hline 9 & 5 & 4 \\ \hline 9 & 3 & 6 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 19 & 10 & 9 \\ \hline 1 & 1 & 0 \\ \hline 18 & 9 & 9 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 20 & 5 & 15 \\ \hline 10 & 2 & 8 \\ \hline 10 & 3 & 7 \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|} \hline \ominus & & \\ \hline 21 & 10 & 11 \\ \hline 6 & 3 & 3 \\ \hline 15 & 7 & 8 \\ \hline \end{array}$$

-	12	6	6
	5	2	3
	7	4	3

+	6	8	14
	4	2	6
	10	10	20

-	20	9	11
	6	2	4
	14	7	7

-	14	9	5
	7	5	2
	7	4	3

+	4	2	6
	5	1	6
	9	3	12

-	15	9	6
	8	3	5
	7	6	1

+	8	4	12
	1	3	4
	9	7	16

-	18	2	16
	9	1	8
	9	1	8

+	7	6	13
	2	3	5
	9	9	18

-	17	10	7
	8	3	5
	9	7	2

+	5	4	9
	2	3	5
	7	7	14

-	17	9	8
	2	1	1
	15	8	7

+	3	2	5
	5	7	12
	8	9	17

-	16	8	8
	9	4	5
	7	4	3



How do you feel?
¿Cómo se siente?

Dear Parent,

You are already familiar with the format of the exercise on the opposite side of this letter, but it now includes subtraction as well as addition. The numbers in the subtraction squares have been specially chosen so as not to end up with negative numbers; the larger number has always been placed on the left.

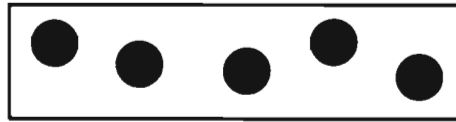
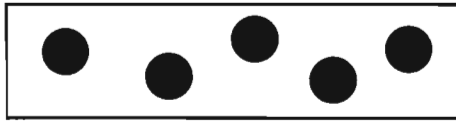
Once again your child has dealt with a great amount of number facts in this interesting lay-out. This time, however, the "surprise" result we discussed in the last letter didn't always work out in subtraction. You might enjoy experimenting with more of these at home.

The second half of this exercise also required more "problem solving," since some of the factors were missing. This is a sophisticated activity that requires a solid understanding of how numbers work - so your child is due some special praise and encouragement!

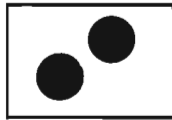
The next few pages your child will be doing deal with multiplication and division. Here we wish to remind you that all children understand the "concept" of multiplication and division before they are introduced to how to communicate it in the shorthand of arithmetic at school. They have shared 6 cookies with 2 friends, seen that 2 groups of 5 fingers are 10 fingers, etc. Now they will be recording that knowledge in the standard notation form that we all know and use.

Pleasure and self-confidence can and should be high for your child now. Let's work together to keep it so!

Sincerely,



or
o



The children should notice that there are the same number of beans in the top half and the bottom half.

$$\begin{array}{r} 2 \times 5 = 10 \\ 5 \times 2 = 10 \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$$

2 times 5 equals 10
2 por 5 iguala 10

5 times 2 equals 10
2 por 2 iguala 10

$$10 \div 2 = 5$$

$$2 \overline{)10}$$

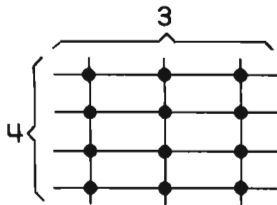
$$10 \div 5 = 2$$

$$5 \overline{)10}$$

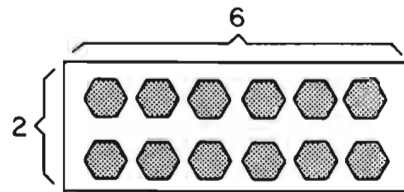
10 divided by 2 equals 5
10 dividido por 2 es iguala 5

10 divided by 5 equals 2
10 dividido por 5 es iguala 2

See also: D&P 33-34
111-116
149-155



crossing points
cruceros



$$3 \times 4 = 12$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$4 \times 3 = 12$$

$$12$$

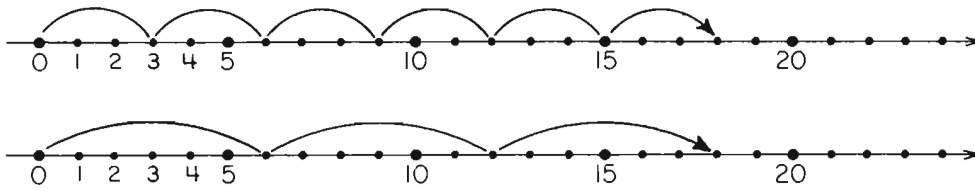
$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$$

$$12 \div 2 = 6$$

$$6 \overline{)12}$$

$$12 \div 6 = 2$$

$$2 \overline{)12}$$



$$\underline{6 \times 3 = 18}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$$

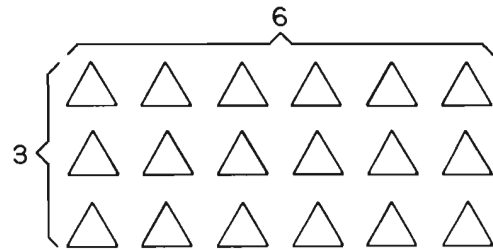
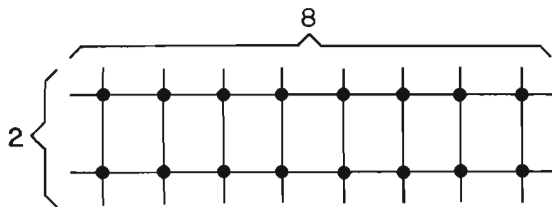
$$\underline{18 \div 3 = 6}$$

$$3 \overline{) 18}$$

$$\underline{3 \times 6 = 18}$$

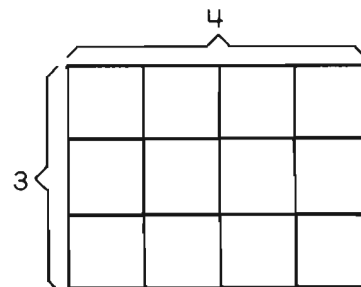
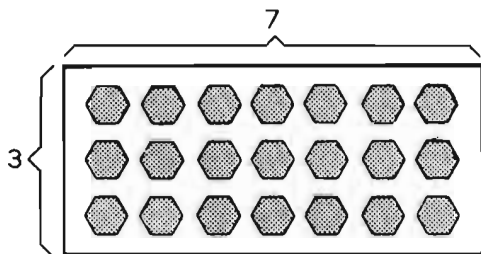
$$\underline{18 \div 6 = 3}$$

$$6 \overline{) 18}$$



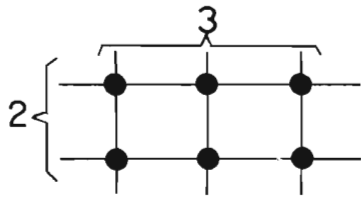
$$2 \overline{) 16} \quad 8 \overline{) 16} \quad \begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array} \quad \begin{array}{r} 8 \\ \times 2 \\ \hline 16 \end{array}$$

$$3 \overline{) 18} \quad 6 \overline{) 18} \quad \begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array} \quad \begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$



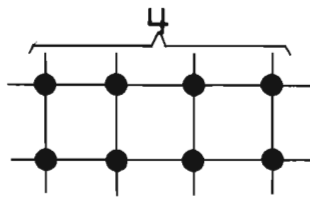
$$3 \overline{) 21} \quad 7 \overline{) 21} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$$

$$4 \overline{) 12} \quad 3 \overline{) 12} \quad \begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$$



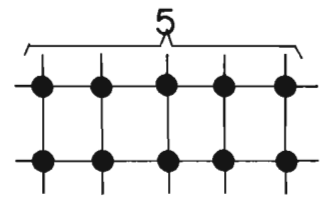
$$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array} \quad \begin{array}{r} 3 \\ 2 \overline{) 6} \end{array}$$

A.



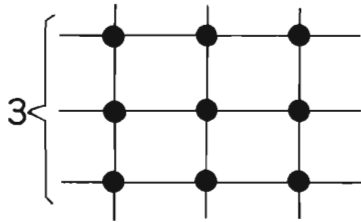
$$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 4 \\ 2 \overline{) 8} \end{array}$$

B.



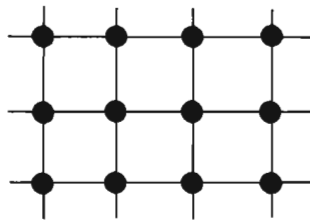
$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 5 \\ 2 \overline{) 10} \end{array}$$

C.



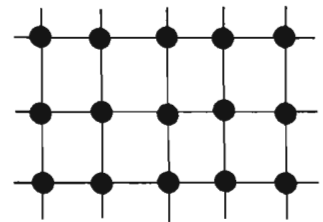
$$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ 3 \overline{) 9} \end{array}$$

D.



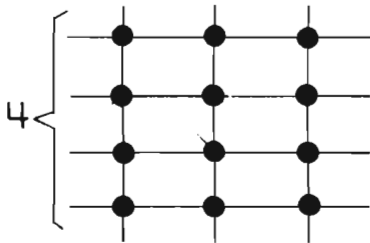
$$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ 3 \overline{) 12} \end{array}$$

E.



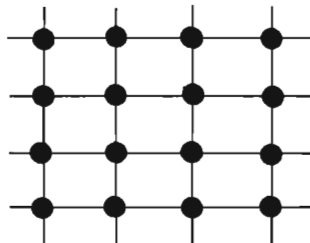
$$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array} \quad \begin{array}{r} 5 \\ 3 \overline{) 15} \end{array}$$

F.



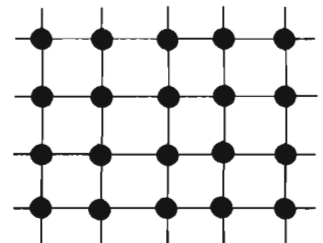
$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 3 \\ 4 \overline{) 12} \end{array}$$

G.



$$\begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 4 \\ 4 \overline{) 16} \end{array}$$

H.



$$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array} \quad \begin{array}{r} 5 \\ 4 \overline{) 20} \end{array}$$

I.

Also, D.I. 125-135, 140-148

$$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array} \quad \begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array} \quad \begin{array}{r} 2 \\ \times 3 \\ \hline 6 \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline 3 \end{array} \quad \begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array} \quad \begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$

A	B	C	D
6	7	10	7
5	8	8	9

E	F	G	H	I
10	13	12	16	18
12	15	9	14	20

Just fill in the large boxes.

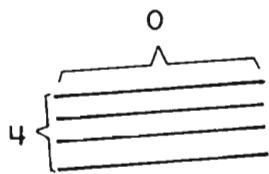
Sólo llene los cuadros grandes.

	0
1	2
3	4
5	6
7	8
9	10
	12
	14
	16
	18
19	20
	22

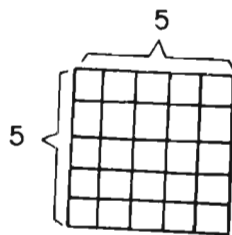
	0
1 2	3
4 5	6
7 8	9
10 11	12
13	15
16	18
	21
	24
	27
28	30
	33

	0
1 2 3	4
5 6 7	8
9 10 11	12
13 14	16
17 18	20
21	24
	28
	32
34	36
	40
	44

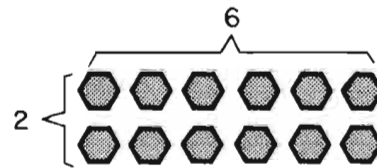
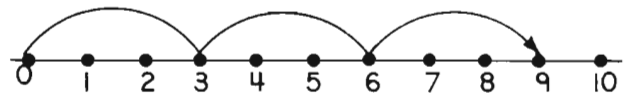
	0
1 2 3 4	5
6 7 8 9	10
11 12 13	15
16 17	20
21	25
	30
	35
	40
42	45
	50
	55



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



$$\begin{array}{r} 3 \\ 3 \\ +3 \\ \hline 9 \end{array}$$



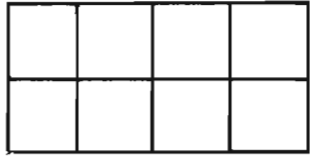
A	B	C
0	4	15
5	0	25

$\begin{array}{r} 0 \\ \times 4 \\ \hline 0 \end{array}$ A.	$\begin{array}{r} 4 \\ \times 0 \\ \hline 0 \end{array}$ B.	$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$ C.	$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array}$ D.	$\begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array}$ E.	$\begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array}$ F.
---	---	--	---	--	--

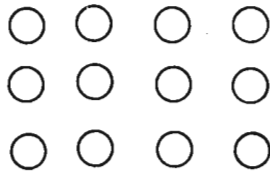
D.	E.	F.	G.
9	14	12	0
8	12	25	7

$4 \overline{) 0}$ G.	$5 \overline{) 25}$ H.	$3 \overline{) 9}$ I.	$2 \overline{) 12}$ J.	$6 \overline{) 12}$ K.
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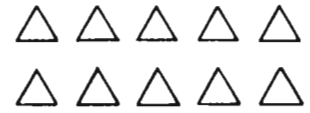
H.	I.	J.	K.
7	3	12	3
5	4	10	2



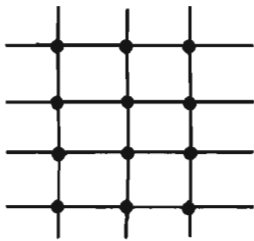
$$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 4 \\ 2 \overline{) 8} \end{array}$$



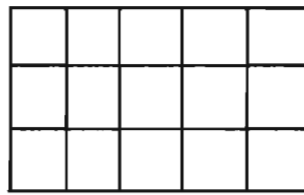
$$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ 3 \overline{) 12} \end{array}$$



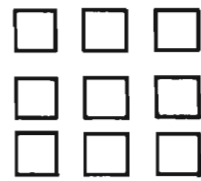
$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 5 \\ 2 \overline{) 10} \end{array}$$



$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 3 \\ 4 \overline{) 12} \end{array}$$



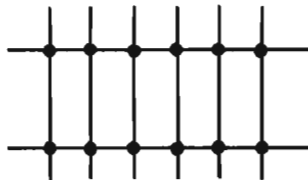
$$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array} \quad \begin{array}{r} 5 \\ 3 \overline{) 15} \end{array}$$



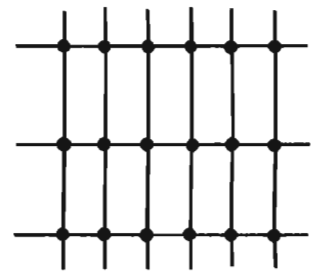
$$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ 3 \overline{) 9} \end{array}$$



$$\begin{array}{r} 6 \\ \times 1 \\ \hline 6 \end{array} \quad \begin{array}{r} 6 \\ 1 \overline{) 6} \end{array}$$



$$\begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array} \quad \begin{array}{r} 6 \\ 2 \overline{) 12} \end{array}$$



$$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array} \quad \begin{array}{r} 6 \\ 3 \overline{) 18} \end{array}$$

$$\begin{array}{r} 4 \\ \times 1 \\ \hline 4 \end{array} \quad \begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array} \quad \begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array} \quad \begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array} \quad \begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$$

$$5 \overline{) 10} \quad 5 \overline{) 15} \quad 5 \overline{) 20} \quad 5 \overline{) 25} \quad 4 \overline{) 20} \quad 2 \overline{) 10}$$

How Many Blocks?

¿Cuántos Cuadros Hay?

Please show the total in the lower right hand corner.

Favor de mostrar el total en la esquina de la mano derecha.

1	2
3	4

1		3
	5	6

1	2		4
	6		8

1	2			5
6				10

Some children may wish to count each block.
Some may be able to find the total by multiplying.

1	2
	4
5	6

1	2	3
		6
7		9

1	2		4
5			8
	10		12

1	2			5
		8		10
				15

1	2
	4
	6
	8

1	2	3
		6
		12

1	2	3	4
			8
	10		
			16

1	2	3	4	5
				20

What are the rules?

¿Cuáles son las reglas?

1	2
3	4
5	6
	8
	10
11	12

1	2	3
4	5	6
7		9
	11	12
		15
	17	18

1	2	3	4
5	6		8
	10		12
13			16
			20
21			24

1	2	3	4	5
6	7	8	9	10
11		13		15
	17			20
				25
		28		30

1	3	5	7	9			15				23		27
2	4	6	8	10	12	14	16	18	20	22	24	26	28

How Many Blocks

Please show the total in the lower right hand corner.

¿Cuántos Cuadros Hay?

Favor de mostrar el total en la esquina de la mano derecha.

1	3
2	4

1	3	
2	4	5

1			
2	4	6	8

1	3	5		
2	4			10

1	4
2	
3	6

1	4	
2	5	
3		9

1			
2			
3			12

1	4	7		
2		8		
3				15

1	
2	
3	
4	8

1	5	
2		10
3		
4		12

1	5	9	
2	6	10	
3			
			16

1	5			
2		10		
			15	
4				20

1	
2	
3	
	10

1	6	
2		
3		
5		15

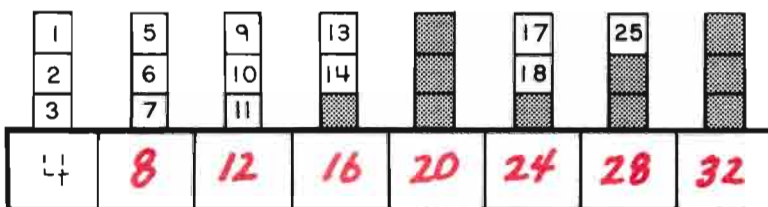
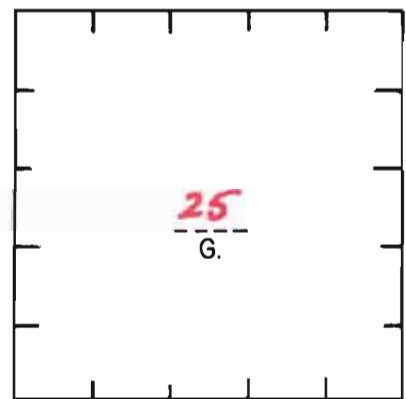
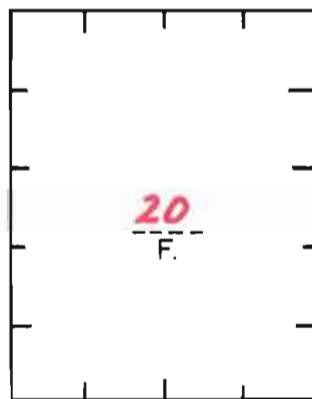
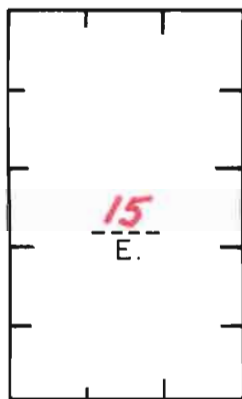
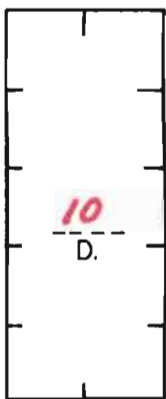
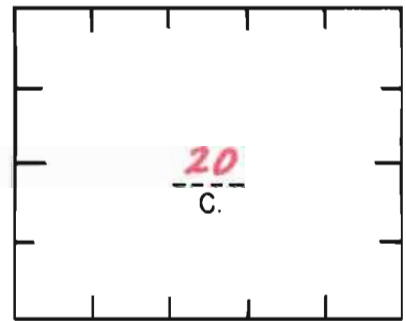
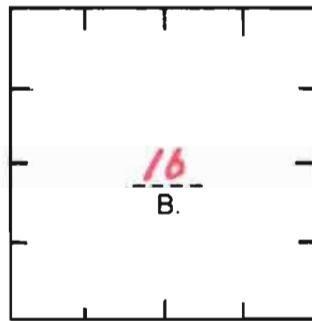
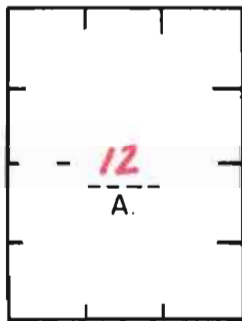
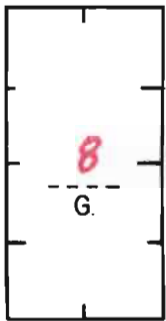
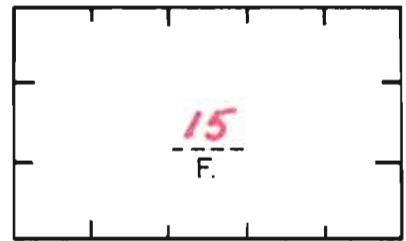
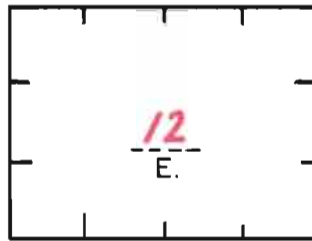
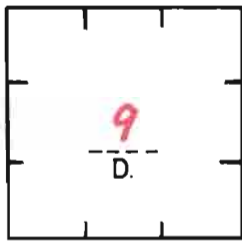
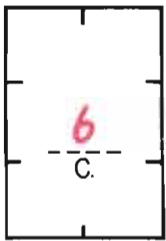
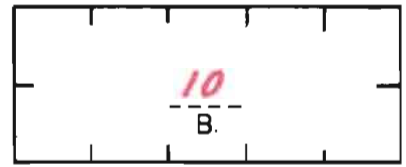
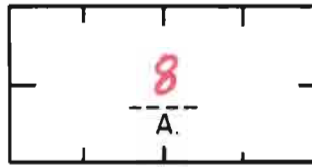
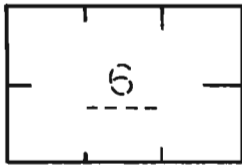
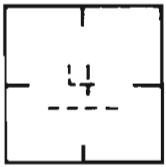
1	6		
2		12	
	8		
4			
			20

1			16	
2		12		
	8			
4				
5				25

1	6	11	16	21	26								
2	7	12	17	22							57		
3	8	13	18										
4	9	14						39		43	48		
5	10	15	20	25	30	35	40	45	50	55	60	65	70

How many blocks were there?

¿Cuántos cuadros había?



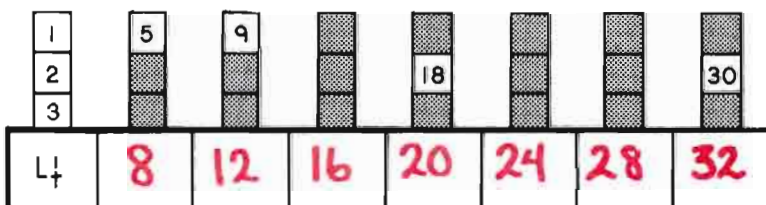
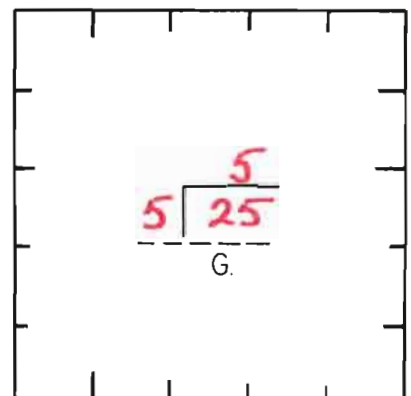
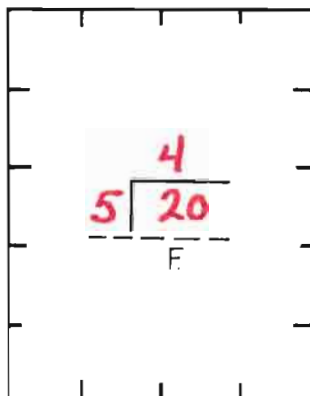
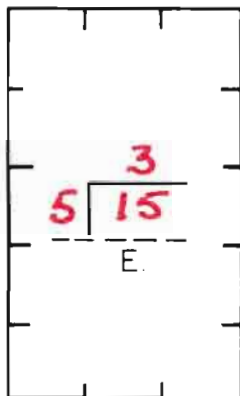
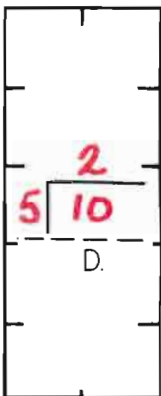
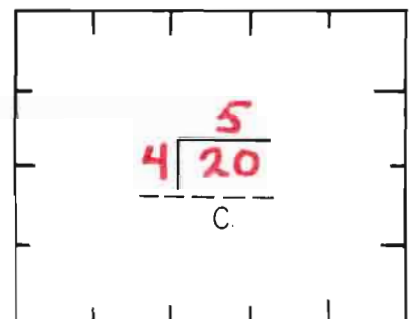
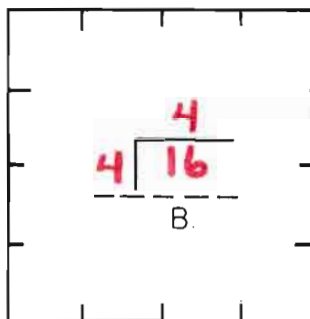
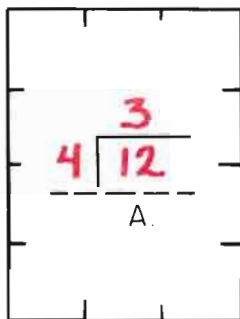
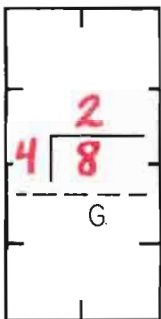
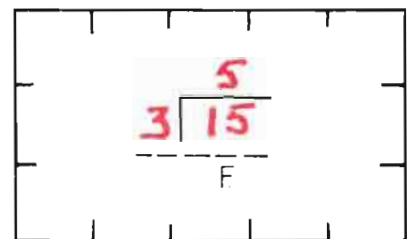
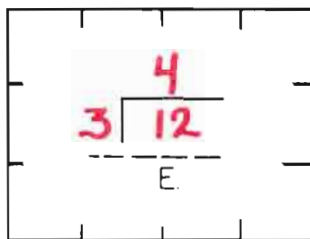
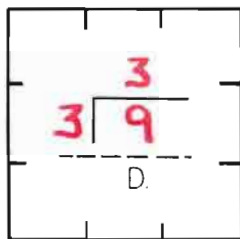
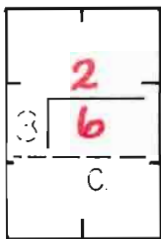
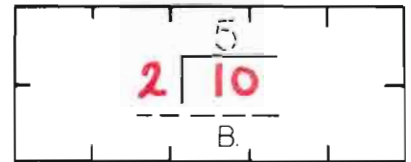
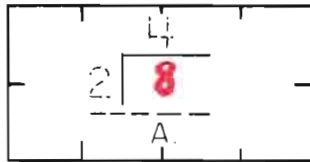
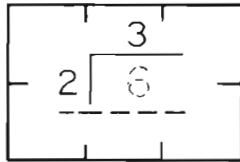
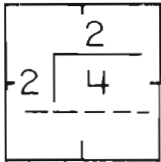
A.	B.	C.	D.	E.	F.	G.
12	10	20	10	12	20	8
8	16	6	9	15	15	25

How many were there?

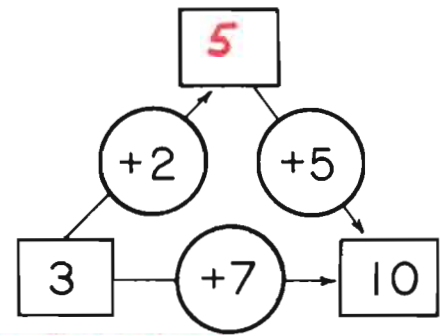
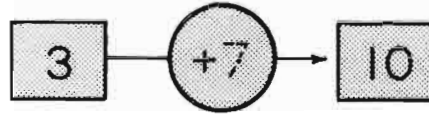
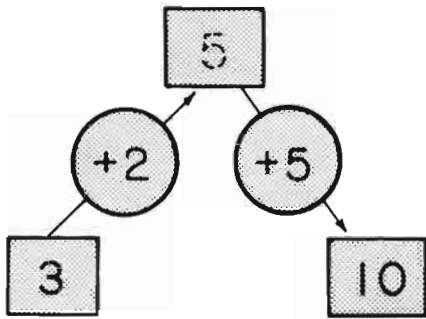
¿Cuántos había?

columns
rows | boxes

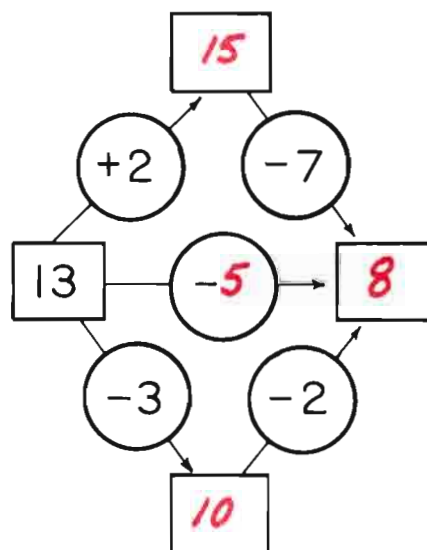
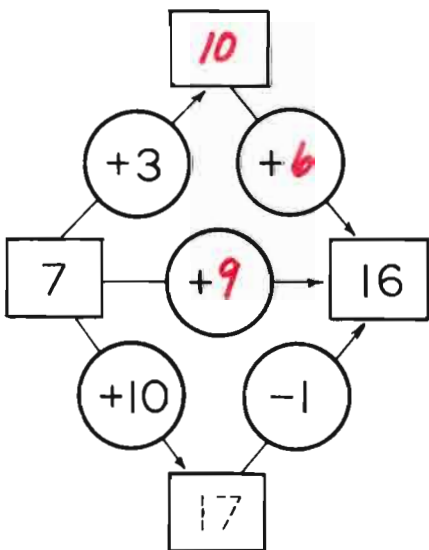
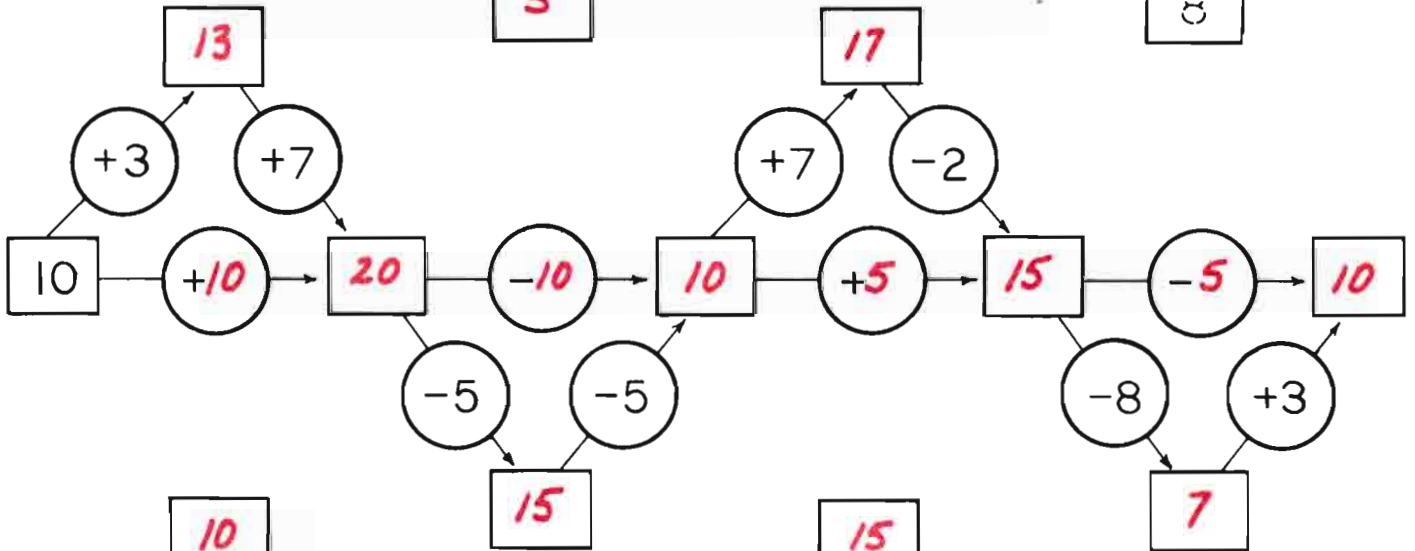
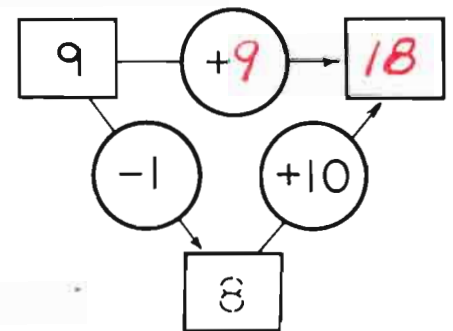
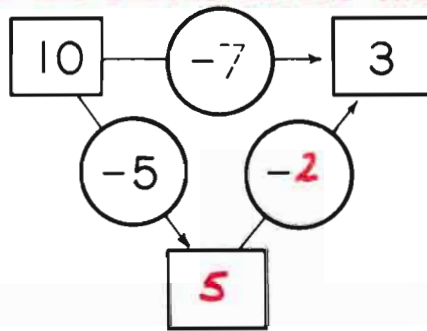
columnas
hileras | cajas



A.	B.	C.	D.	E.	F.	G.
12	16	6	9	15	15	25
8	10	20	10	12	20	8



Encourage the children to notice the direction of the arrows before they start.



From the List

De la Lista

See also C/PP 13, 14, 16, 33, 34, 74, 76

<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 2 \\ + 7 \\ \hline 9 \end{array}$	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array}$	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 4 \\ - 2 \\ \hline 2 \end{array}$	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 14 \\ - 7 \\ \hline 7 \end{array}$	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">2,3,7</div> $\begin{array}{r} 5 \\ + 2 \\ \hline 7 \end{array}$
---	---	---	---	--	---

2,3,7

$\begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array}$	$\begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array}$	$\begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array}$
$\begin{array}{r} 7 \\ + 2 \\ \hline 9 \end{array}$	$\begin{array}{r} 7 \\ + 3 \\ \hline 10 \end{array}$	$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array}$

2,3,7

$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$	$\begin{array}{r} 7 \\ - 3 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ - 2 \\ \hline 1 \end{array}$
$\begin{array}{r} 14 \\ - 7 \\ \hline 7 \end{array}$	$\begin{array}{r} 9 \\ - 2 \\ \hline 7 \end{array}$	$\begin{array}{r} 10 \\ - 3 \\ \hline 7 \end{array}$

1,5,8

$\begin{array}{r} 1 \\ + 1 \\ \hline 2 \end{array}$	$\begin{array}{r} 1 \\ + 5 \\ \hline 6 \end{array}$	$\begin{array}{r} 1 \\ + 8 \\ \hline 9 \end{array}$
$\begin{array}{r} 5 \\ + 5 \\ \hline 10 \end{array}$	$\begin{array}{r} 8 \\ + 5 \\ \hline 13 \end{array}$	$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$

4,6,9

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

From the List

De la Lista

1, 4, 9

$\begin{array}{r} 1 \\ \hline + 1 \\ \hline 2 \end{array}$	$\begin{array}{r} 1 \\ \hline + 4 \\ \hline 5 \end{array}$	$\begin{array}{r} 4 \\ \hline + 4 \\ \hline 8 \end{array}$
$\begin{array}{r} 9 \\ \hline + 1 \\ \hline 10 \end{array}$	$\begin{array}{r} 9 \\ \hline + 4 \\ \hline 13 \end{array}$	$\begin{array}{r} 9 \\ \hline + 9 \\ \hline 18 \end{array}$

2, 3, 7

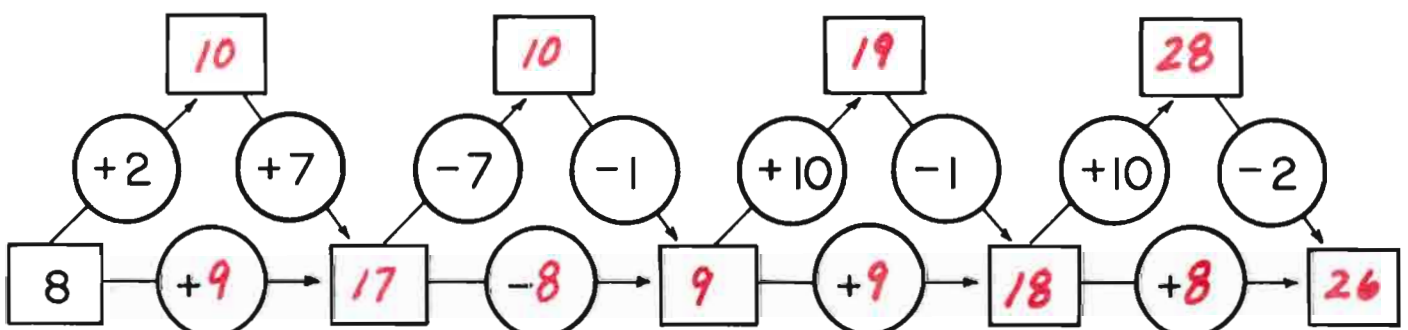
$\begin{array}{r} 3 \\ \hline - 2 \\ \hline 1 \end{array}$	$\begin{array}{r} 7 \\ \hline - 3 \\ \hline 4 \end{array}$	$\begin{array}{r} 7 \\ \hline - 2 \\ \hline 5 \end{array}$
$\begin{array}{r} 10 \\ \hline - 3 \\ \hline 7 \end{array}$	$\begin{array}{r} 6 \\ \hline - 3 \\ \hline 3 \end{array}$	$\begin{array}{r} 14 \\ \hline - 7 \\ \hline 7 \end{array}$

3, 4, 8

$\begin{array}{r} 3 \\ \hline + 3 \\ \hline 6 \end{array}$	$\begin{array}{r} 8 \\ \hline + 3 \\ \hline 11 \end{array}$	$\begin{array}{r} 8 \\ \hline + 8 \\ \hline 16 \end{array}$
$\begin{array}{r} 12 \\ \hline - 4 \\ \hline 8 \end{array}$	$\begin{array}{r} 8 \\ \hline - 5 \\ \hline 3 \end{array}$	$\begin{array}{r} 8 \\ \hline - 3 \\ \hline 5 \end{array}$

6, 8, 9

$\begin{array}{r} 6 \\ \hline + 6 \\ \hline 12 \end{array}$	$\begin{array}{r} 6 \\ \hline + 8 \\ \hline 14 \end{array}$	$\begin{array}{r} 6 \\ \hline + 9 \\ \hline 15 \end{array}$
$\begin{array}{r} 8 \\ \hline + 8 \\ \hline 16 \end{array}$	$\begin{array}{r} 8 \\ \hline + 9 \\ \hline 17 \end{array}$	$\begin{array}{r} 9 \\ \hline + 9 \\ \hline 18 \end{array}$



4, 7, 12

$\begin{array}{r} \underline{\underline{7}} \\ + \underline{\underline{4}} \\ \hline 11 \end{array}$	$\begin{array}{r} \underline{\underline{7}} \\ + \underline{\underline{7}} \\ \hline 14 \end{array}$	$\begin{array}{r} \underline{\underline{12}} \\ + \underline{\underline{4}} \\ \hline 16 \end{array}$
$\begin{array}{r} \underline{\underline{12}} \\ - \underline{\underline{7}} \\ \hline 5 \end{array}$	$\begin{array}{r} \underline{\underline{12}} \\ - \underline{\underline{4}} \\ \hline 8 \end{array}$	$\begin{array}{r} 19 \\ - \underline{\underline{7}} \\ \hline 12 \end{array}$

5, 9, 11

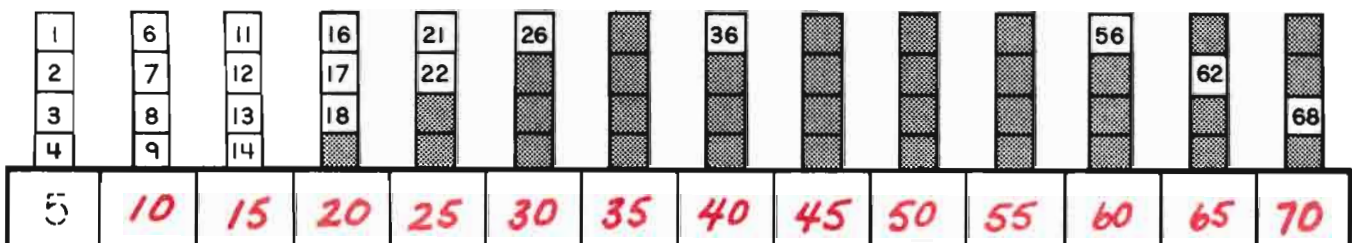
$\begin{array}{r} \underline{\underline{11}} \\ + \underline{\underline{5}} \\ \hline 16 \end{array}$	$\begin{array}{r} \underline{\underline{9}} \\ + \underline{\underline{9}} \\ \hline 18 \end{array}$	$\begin{array}{r} \underline{\underline{11}} \\ + \underline{\underline{9}} \\ \hline 20 \end{array}$
$\begin{array}{r} 9 \\ - \underline{\underline{5}} \\ \hline 4 \end{array}$	$\begin{array}{r} 11 \\ - \underline{\underline{5}} \\ \hline 6 \end{array}$	$\begin{array}{r} 22 \\ - \underline{\underline{11}} \\ \hline 11 \end{array}$

6, 8, 13

$\begin{array}{r} \underline{\underline{6}} \\ + \underline{\underline{8}} \\ \hline 14 \end{array}$	$\begin{array}{r} \underline{\underline{13}} \\ - \underline{\underline{6}} \\ \hline 7 \end{array}$	$\begin{array}{r} \underline{\underline{8}} \\ + \underline{\underline{8}} \\ \hline 16 \end{array}$
$\begin{array}{r} 19 \\ - \underline{\underline{13}} \\ \hline 6 \end{array}$	$\begin{array}{r} \underline{\underline{6}} \\ + \underline{\underline{6}} \\ \hline 12 \end{array}$	$\begin{array}{r} 13 \\ - \underline{\underline{5}} \\ \hline 8 \end{array}$

9, 10, 15

$\begin{array}{r} \underline{\underline{9}} \\ + \underline{\underline{9}} \\ \hline 18 \end{array}$	$\begin{array}{r} \underline{\underline{10}} \\ + \underline{\underline{10}} \\ \hline 20 \end{array}$	$\begin{array}{r} \underline{\underline{15}} \\ + \underline{\underline{9}} \\ \hline 24 \end{array}$
$\begin{array}{r} 19 \\ - \underline{\underline{9}} \\ \hline 10 \end{array}$	$\begin{array}{r} 25 \\ - \underline{\underline{15}} \\ \hline 10 \end{array}$	$\begin{array}{r} 30 \\ - \underline{\underline{15}} \\ \hline 15 \end{array}$



3, 5, 9

$\begin{array}{r} \underline{\underline{5}} \\ + \underline{\underline{3}} \\ \hline 8 \end{array}$	$\begin{array}{r} \underline{\underline{9}} \\ + \underline{\underline{5}} \\ \hline 14 \end{array}$	$\begin{array}{r} \underline{\underline{9}} \\ + \underline{\underline{3}} \\ \hline 12 \end{array}$
$\begin{array}{r} \underline{\underline{9}} \\ - \underline{\underline{5}} \\ \hline 4 \end{array}$	$\begin{array}{r} \underline{\underline{9}} \\ - \underline{\underline{3}} \\ \hline 6 \end{array}$	$\begin{array}{r} 10 \\ - \underline{\underline{5}} \\ \hline 5 \end{array}$

5, 8, 10

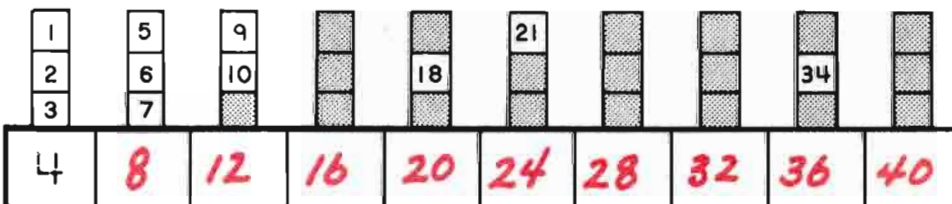
$\begin{array}{r} \underline{\underline{10}} \\ + \underline{\underline{8}} \\ \hline 18 \end{array}$	$\begin{array}{r} \underline{\underline{10}} \\ + \underline{\underline{5}} \\ \hline 15 \end{array}$	$\begin{array}{r} \underline{\underline{8}} \\ + \underline{\underline{5}} \\ \hline 13 \end{array}$
$\begin{array}{r} 13 \\ - \underline{\underline{8}} \\ \hline 5 \end{array}$	$\begin{array}{r} 20 \\ - \underline{\underline{10}} \\ \hline 10 \end{array}$	$\begin{array}{r} 16 \\ - \underline{\underline{8}} \\ \hline 8 \end{array}$

7, 8, 13

$\begin{array}{r} \underline{\underline{8}} \\ + \underline{\underline{7}} \\ \hline 15 \end{array}$	$\begin{array}{r} \underline{\underline{13}} \\ + \underline{\underline{8}} \\ \hline 21 \end{array}$	$\begin{array}{r} \underline{\underline{13}} \\ + \underline{\underline{7}} \\ \hline 20 \end{array}$
$\begin{array}{r} 26 \\ - \underline{\underline{13}} \\ \hline 13 \end{array}$	$\begin{array}{r} \underline{\underline{13}} \\ - \underline{\underline{8}} \\ \hline 5 \end{array}$	$\begin{array}{r} 14 \\ - \underline{\underline{7}} \\ \hline 7 \end{array}$

6, 11, 14

$\begin{array}{r} \underline{\underline{14}} \\ + \underline{\underline{6}} \\ \hline 20 \end{array}$	$\begin{array}{r} \underline{\underline{14}} \\ + \underline{\underline{11}} \\ \hline 25 \end{array}$	$\begin{array}{r} \underline{\underline{11}} \\ + \underline{\underline{11}} \\ \hline 22 \end{array}$
$\begin{array}{r} 17 \\ - \underline{\underline{6}} \\ \hline 11 \end{array}$	$\begin{array}{r} 20 \\ - \underline{\underline{6}} \\ \hline 14 \end{array}$	$\begin{array}{r} 28 \\ - \underline{\underline{14}} \\ \hline 14 \end{array}$



How do you feel?
¿Cómo se siente?

Dear Parent,

You will see on the check-up test on the other side of this letter that your child has successfully done lots of "problem-solving" activities that demand continual use of addition and subtraction facts. You may have seen other pages coming home prior to this with "From the List" exercises similar to these. In each group of problems only the numbers included in the "list" above the group may be used. This demands careful selection of factors and valuable trial and error experiments. Here again we don't discourage the use of counters or scratch mark representations if there is the need.

Your child has also done a number of multiplication and division pages now, but this has not yet been tested. There is, however, a subtle introduction to this at the bottom of this test, in the form of the 5's timestable.

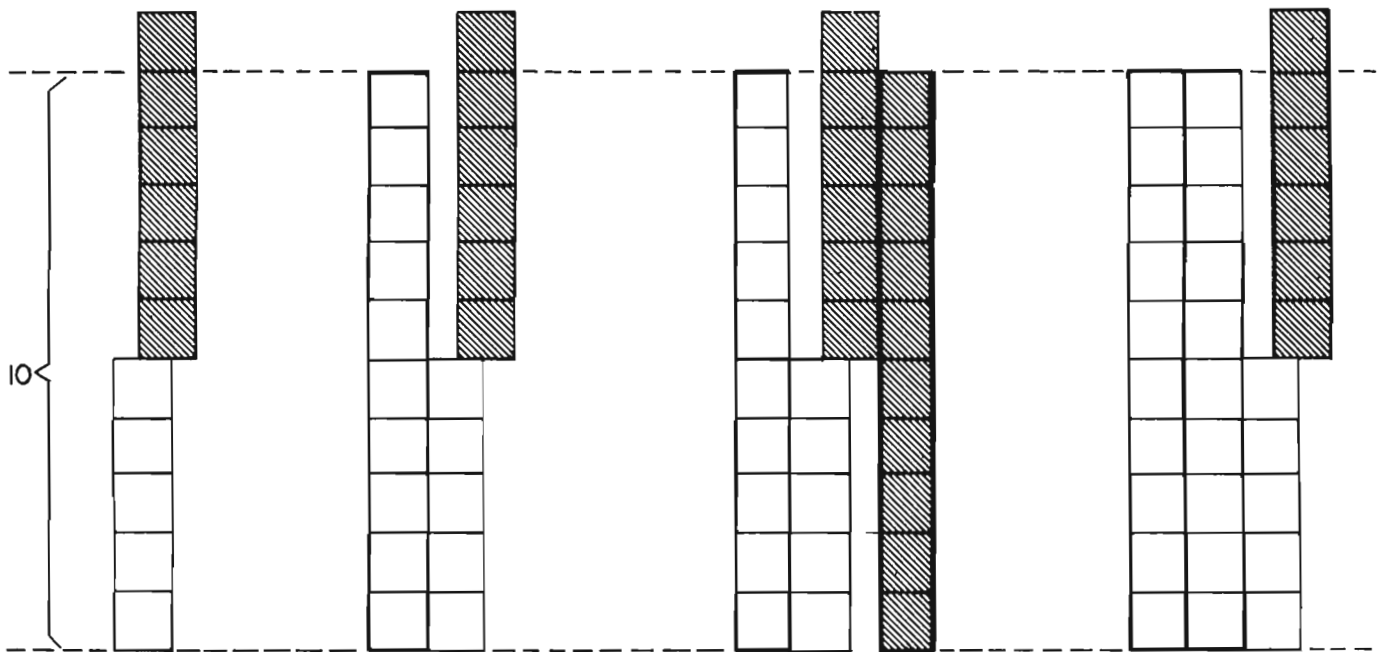
Multiplication and division can be fun and easy to practice at home in the form of "real, everyday" sorts of examples when the interest is there. You'll be able to come up with lots of ideas: i.e. with 4 people sitting at the table - each person has 3 pieces of silverware (or 2 or 1 or 4) so how many pieces are there on the table; each person has 10 fingers so how many fingers at the table; each person has 2 eyes so how many eyes at the table; there are 9 pieces of toast, so how many is each person's share (yes, we have to deal with remainders sometimes!) etc.

Most important is to practice together only when you and your child can do so with a positive, fun attitude. That's when learning happens. Thanks again for your help and support!

Sincerely,

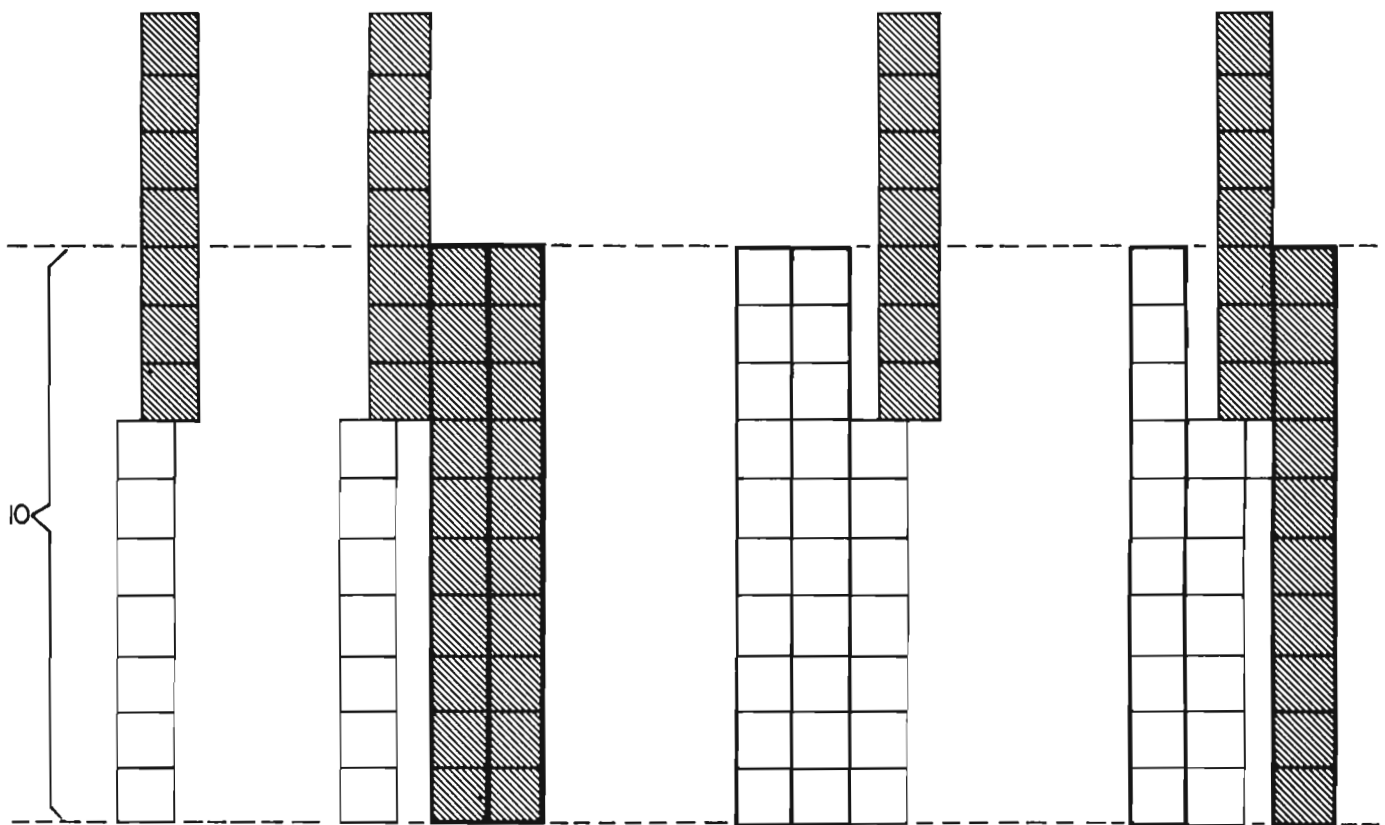
How Many Blocks

¿Cuántos Cuadros?

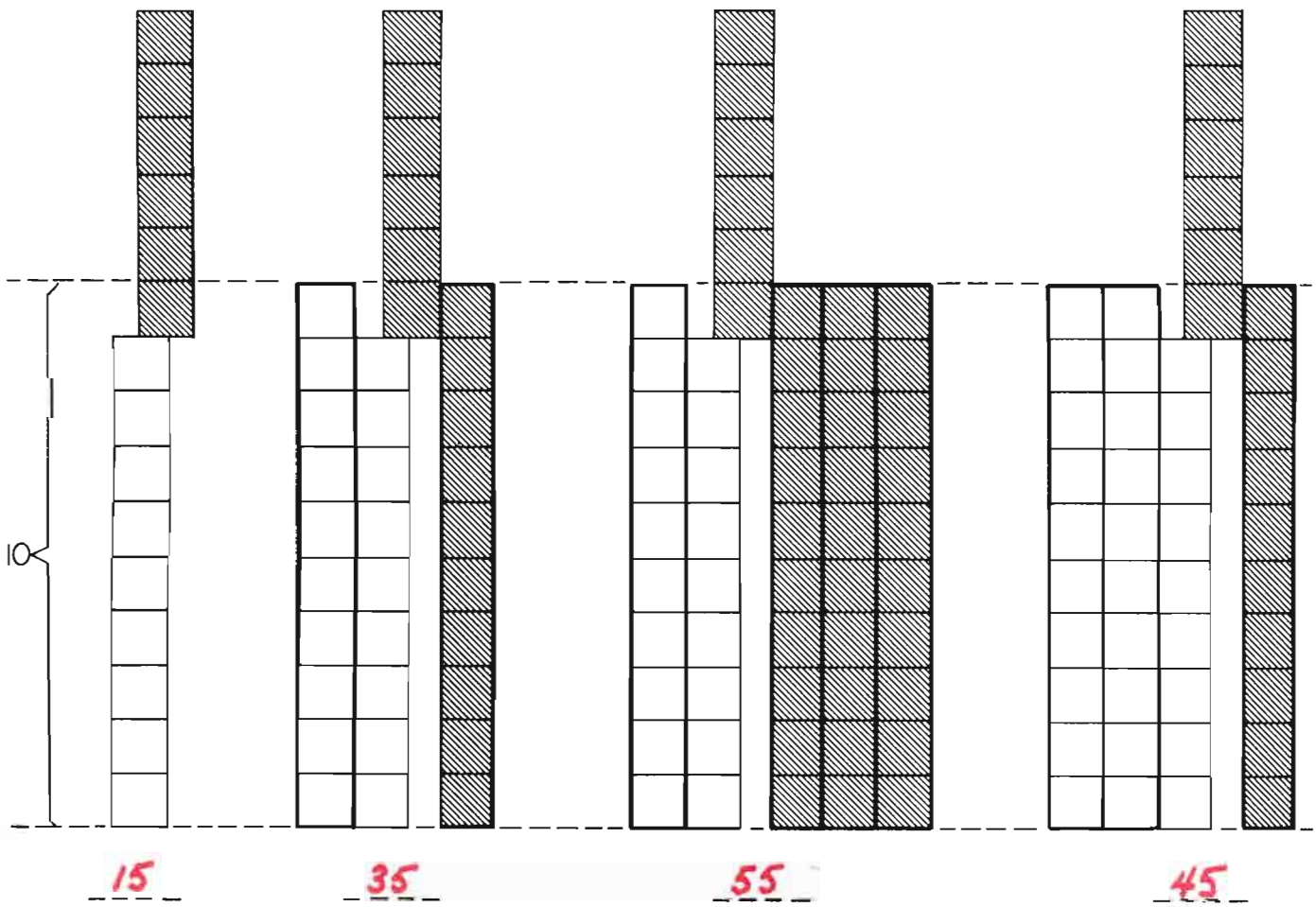
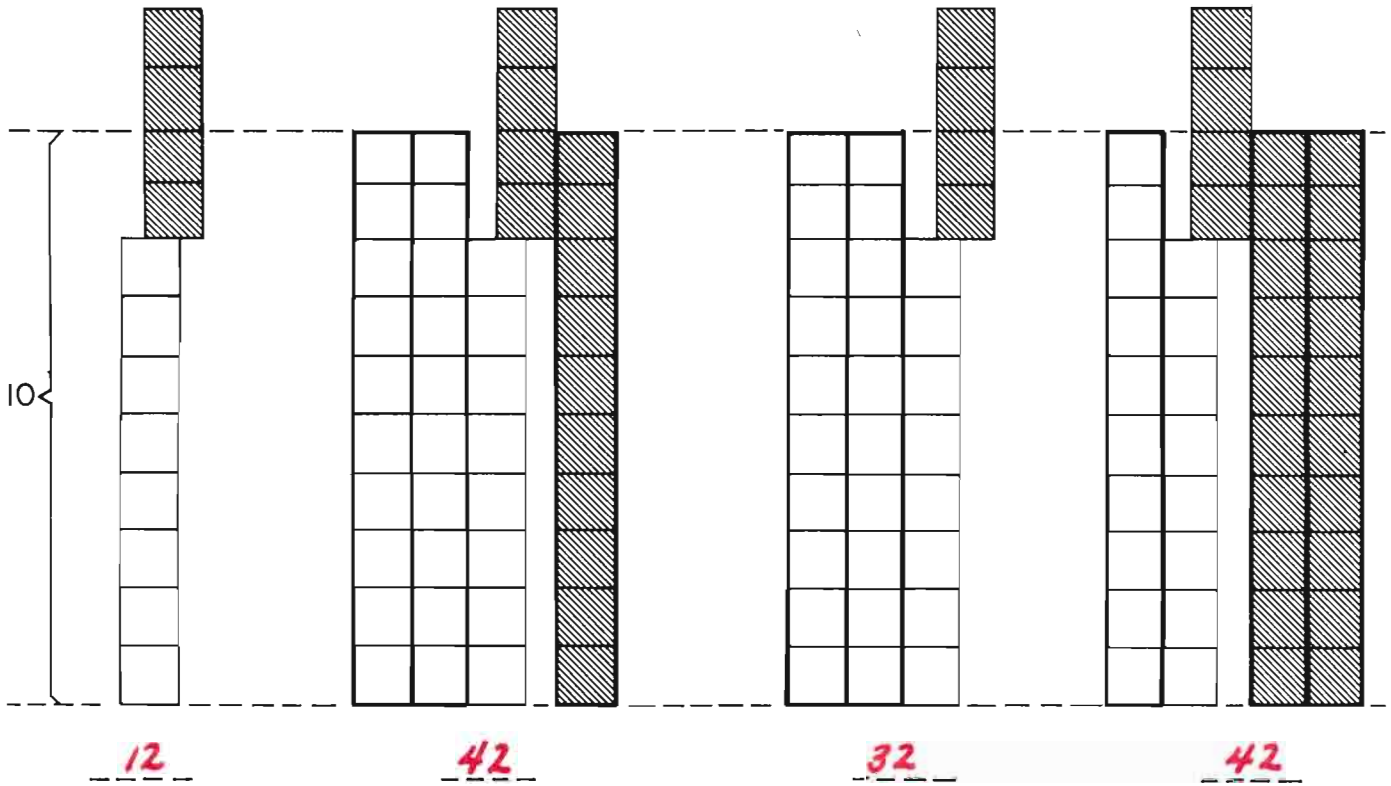


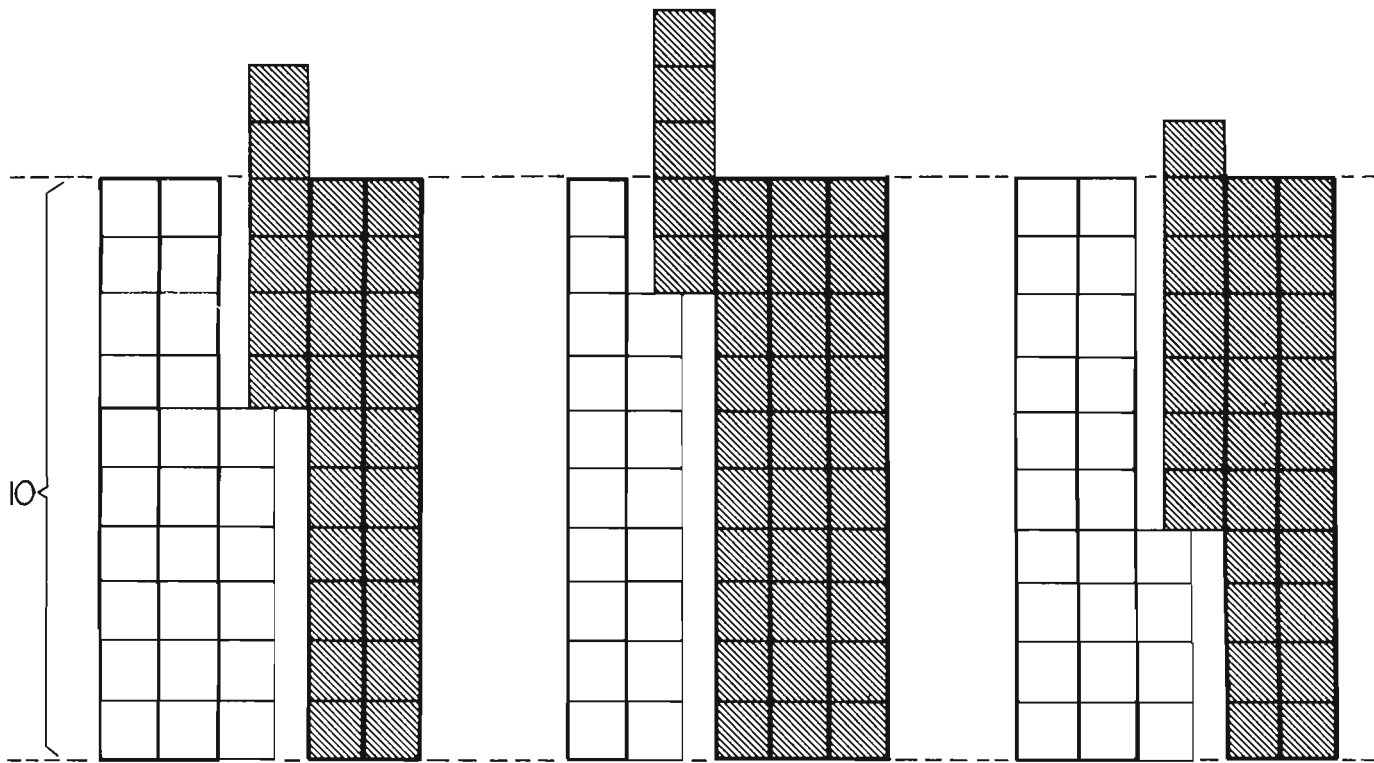
11 21 31 31

Encourage the children to notice the groupings of 10.
See also: D.I., 49-59



14 34 34 34

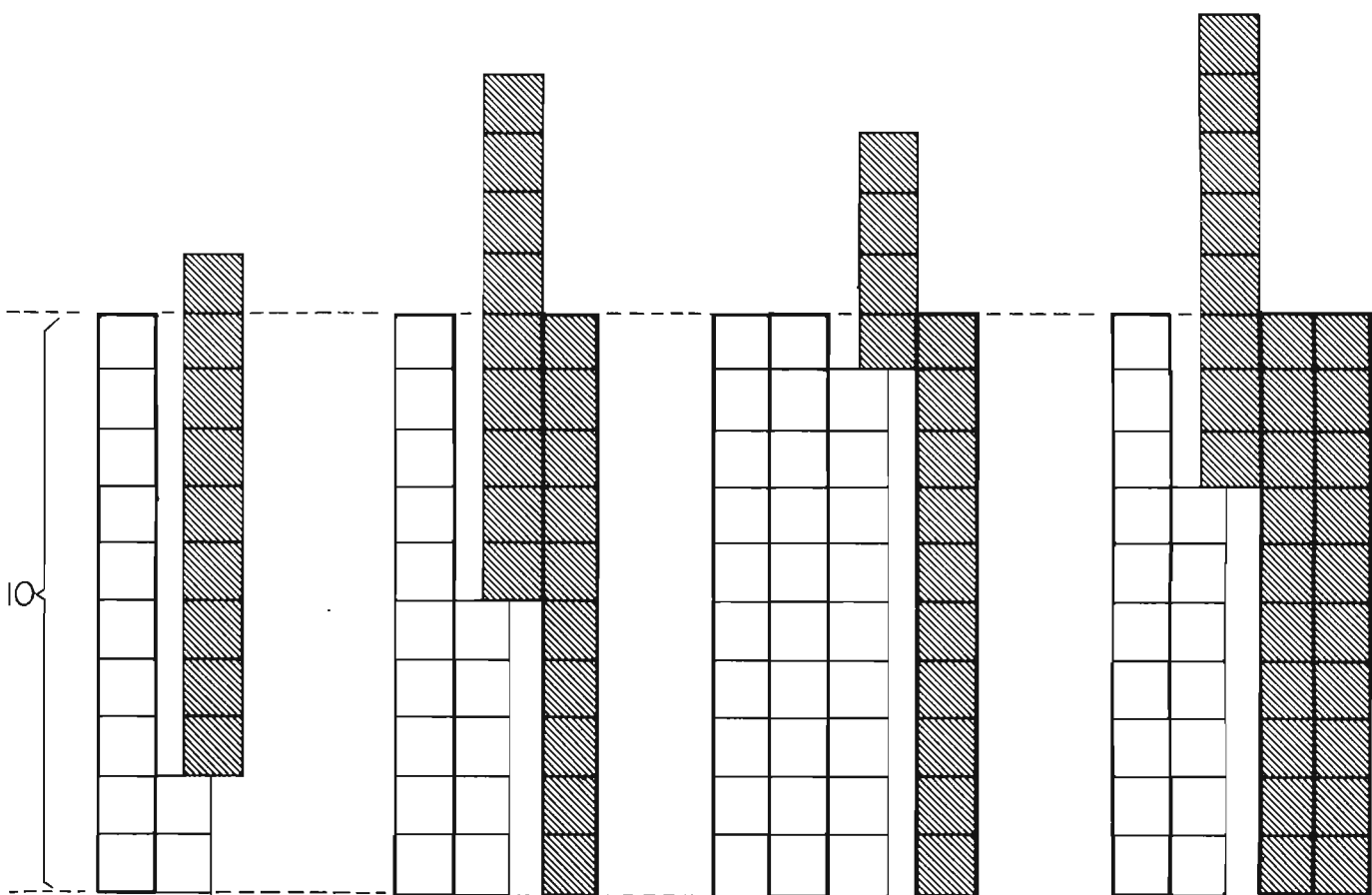




52

53

51



21

34

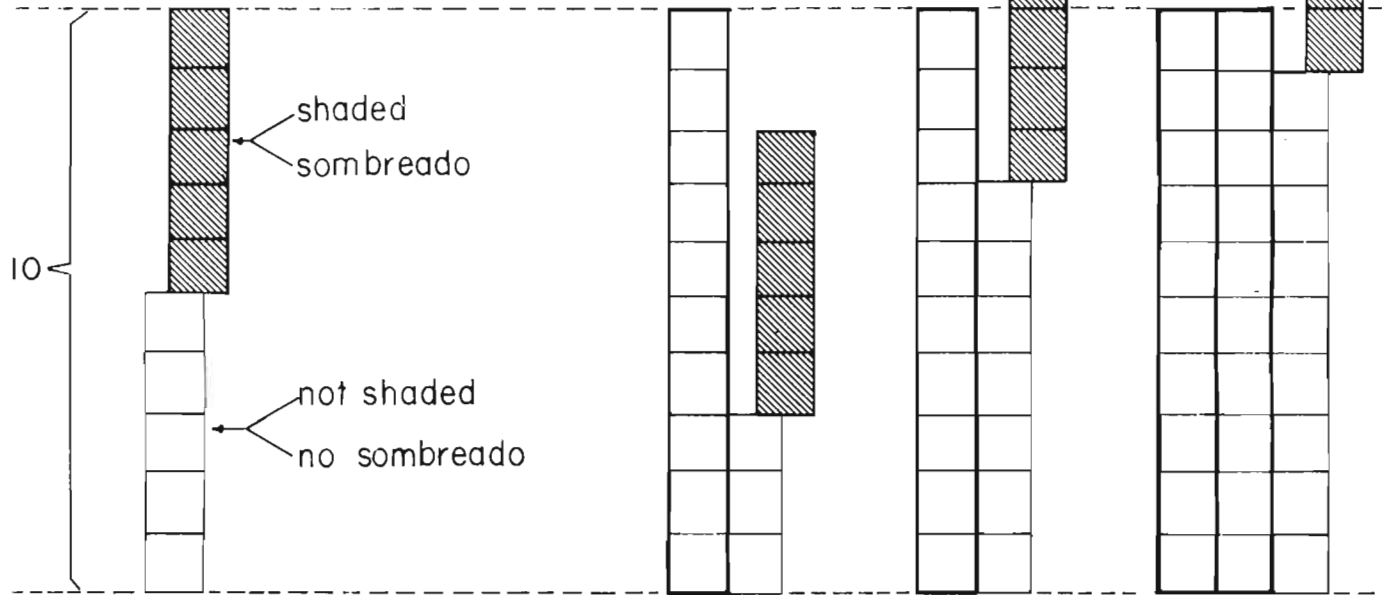
43

45

Not Shaded . . . Shaded . . . and Total

No Sombreado . . . Sombreado . . . y Total

See also: C/PP 28, 30, 35, 82
D&P 110A-110D



$$\begin{array}{r}
 \underline{\underline{5}} \leftarrow \begin{array}{l} \text{not shaded} \\ \text{no sombreado} \end{array} \\
 + \underline{\underline{5}} \leftarrow \text{shaded - sombreado} \\
 \hline
 10 \leftarrow \text{total}
 \end{array}$$

$$\begin{array}{r}
 \underline{\underline{13}} \\
 + \underline{\underline{5}} \\
 \hline
 18 \text{ A.}
 \end{array}$$

$$\begin{array}{r}
 \underline{\underline{17}} \\
 + \underline{\underline{5}} \\
 \hline
 22 \text{ C.}
 \end{array}$$

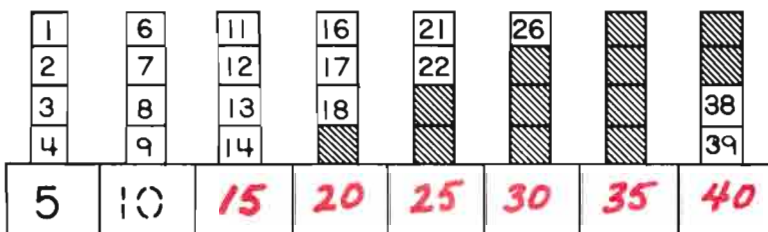
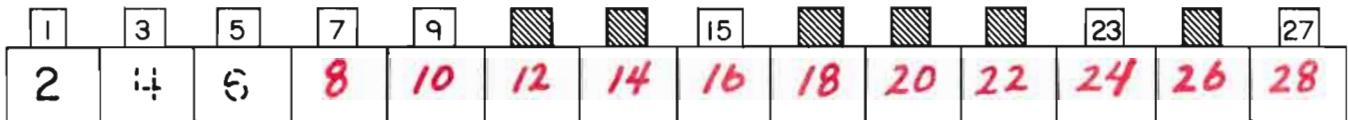
$$\begin{array}{r}
 \underline{\underline{29}} \\
 + \underline{\underline{5}} \\
 \hline
 34 \text{ E.}
 \end{array}$$

$$\begin{array}{r}
 \underline{\underline{10}} \leftarrow \text{total} \\
 - \underline{\underline{5}} \leftarrow \text{shaded - sombreado} \\
 \hline
 5 \leftarrow \begin{array}{l} \text{not shaded} \\ \text{no sombreado} \end{array}
 \end{array}$$

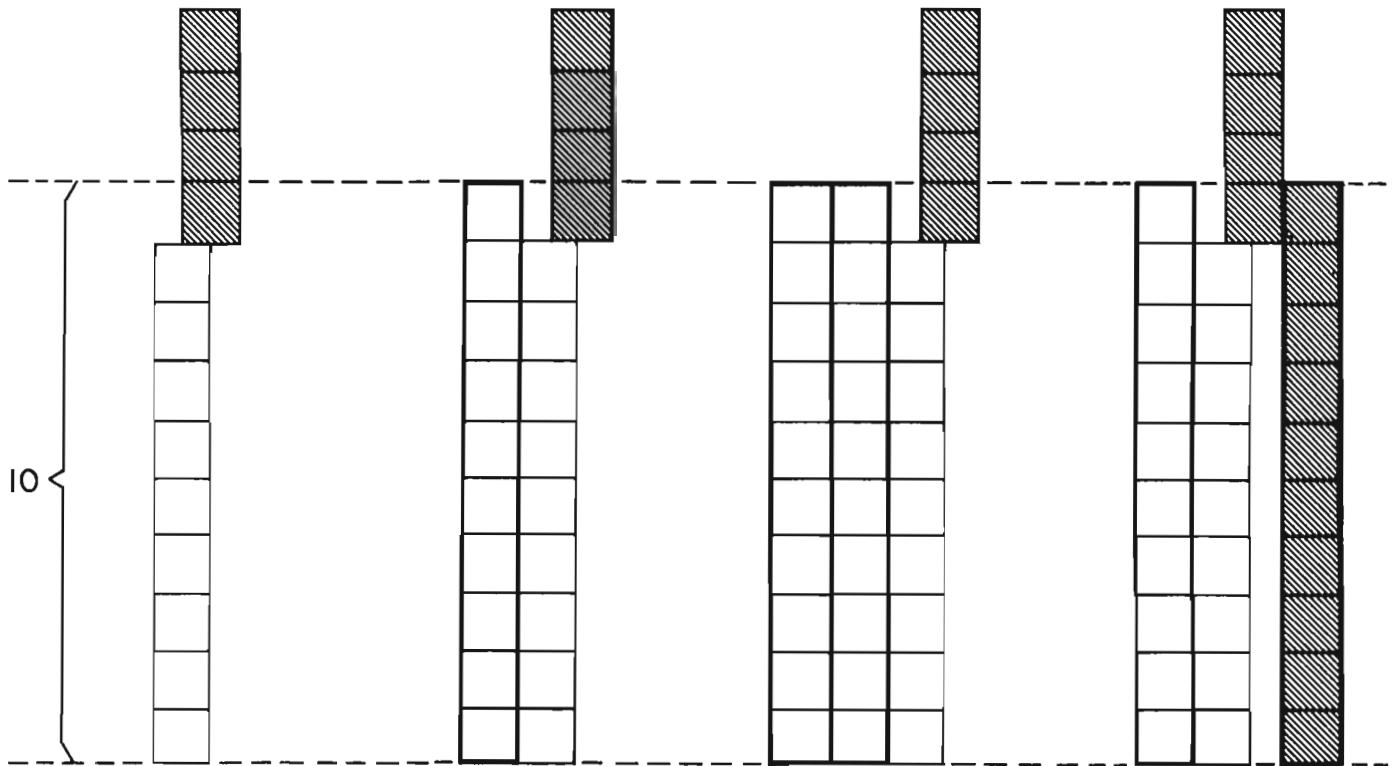
$$\begin{array}{r}
 \underline{\underline{18}} \\
 - \underline{\underline{5}} \\
 \hline
 13 \text{ B.}
 \end{array}$$

$$\begin{array}{r}
 \underline{\underline{22}} \\
 - \underline{\underline{5}} \\
 \hline
 17 \text{ D.}
 \end{array}$$

$$\begin{array}{r}
 \underline{\underline{34}} \\
 - \underline{\underline{5}} \\
 \hline
 29 \text{ F.}
 \end{array}$$



	A.	B.	C.	D.	E.	F.
	17	13	22	26	34	31
	18	11	25	17	25	29



$$\begin{array}{r} \underline{\underline{9}} \\ + \underline{\underline{4}} \\ \hline 13 \end{array} \text{ A.}$$

$$\begin{array}{r} \underline{\underline{19}} \\ + \underline{\underline{4}} \\ \hline 23 \end{array} \text{ B.}$$

$$\begin{array}{r} \underline{\underline{29}} \\ + \underline{\underline{4}} \\ \hline 33 \end{array} \text{ C.}$$

$$\begin{array}{r} \underline{\underline{19}} \\ + \underline{\underline{14}} \\ \hline 33 \end{array} \text{ D.}$$

$$\begin{array}{r} \underline{\underline{13}} \\ - \underline{\underline{4}} \\ \hline 9 \end{array} \text{ E.}$$

$$\begin{array}{r} \underline{\underline{23}} \\ - \underline{\underline{4}} \\ \hline 19 \end{array} \text{ F.}$$

$$\begin{array}{r} \underline{\underline{33}} \\ - \underline{\underline{4}} \\ \hline 29 \end{array} \text{ G.}$$

$$\begin{array}{r} \underline{\underline{33}} \\ - \underline{\underline{14}} \\ \hline 19 \end{array} \text{ H.}$$

A set of 10 sticks and loose beans is helpful for the visual manipulation of these problems. When there are more than 10 loose beans in addition problems, the 10 are traded for a 10-stick and marked on the paper as the new "re-grouped" 10.

$$\begin{array}{r} 29 \\ + 14 \\ \hline 43 \end{array} \text{ A.}$$

$$\begin{array}{r} 39 \\ + 14 \\ \hline 53 \end{array} \text{ B.}$$

$$\begin{array}{r} 29 \\ + 24 \\ \hline 53 \end{array} \text{ C.}$$

$$\begin{array}{r} 39 \\ + 34 \\ \hline 73 \end{array} \text{ D.}$$

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

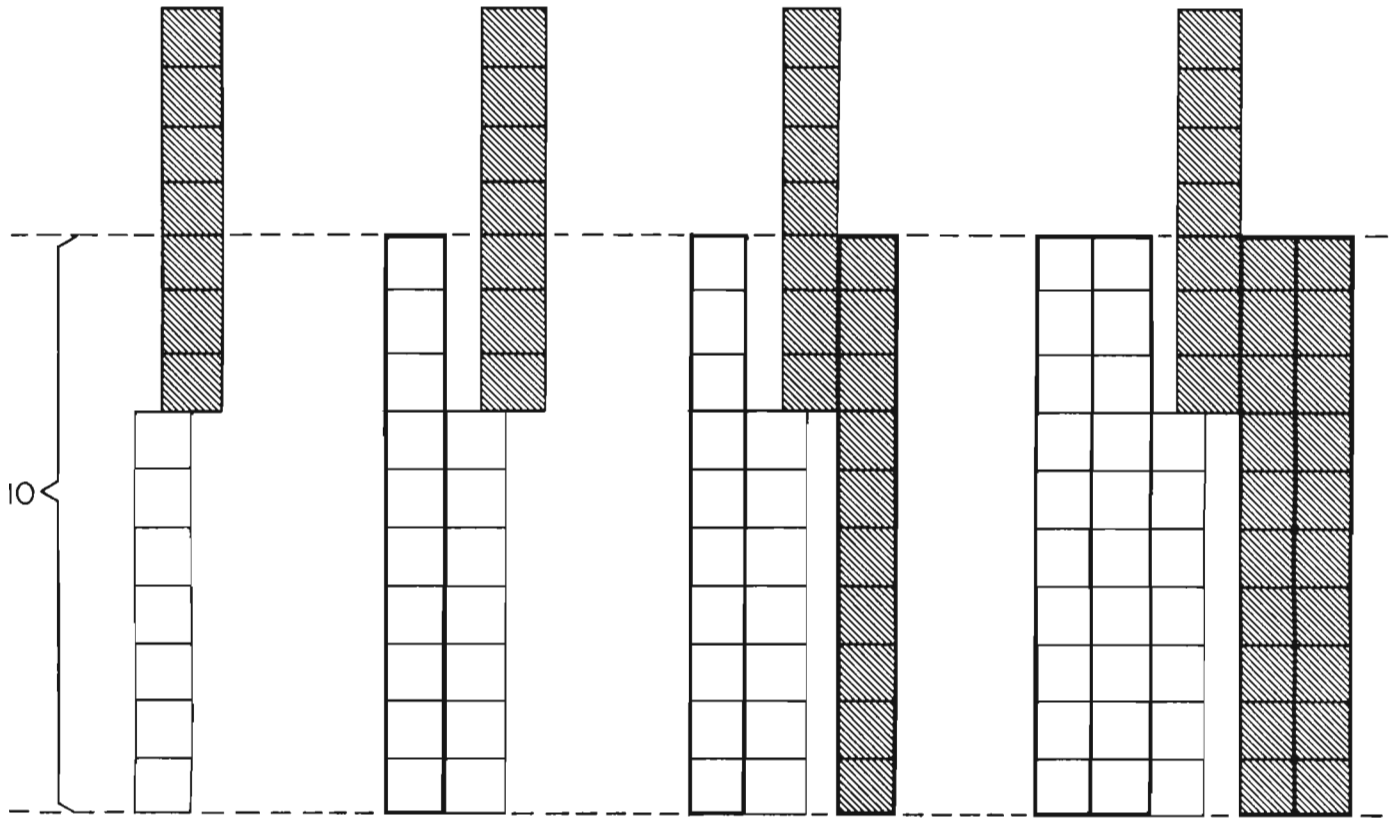
$$\begin{array}{r} 14 \\ + 9 \\ \hline 23 \end{array} \text{ F.}$$

$$\begin{array}{r} 34 \\ + 9 \\ \hline 43 \end{array} \text{ G.}$$

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

A.	B.	C.	D.
13	53	53	33
43	23	33	73

E.	F.	G.	H.
13	19	43	19
9	23	29	33



$$\begin{array}{r} \underline{\quad 7} \\ + \underline{\quad 7} \\ \hline \underline{\quad 14} \end{array} \text{ A.}$$

$$\begin{array}{r} \underline{\quad 17} \\ + \underline{\quad 7} \\ \hline \underline{\quad 24} \end{array} \text{ C.}$$

$$\begin{array}{r} \underline{\quad 17} \\ + \underline{\quad 17} \\ \hline \underline{\quad 34} \end{array} \text{ E.}$$

$$\begin{array}{r} \underline{\quad 27} \\ + \underline{\quad 27} \\ \hline \underline{\quad 54} \end{array} \text{ G.}$$

The answers to G & H in this group do not appear in their proper places in the answer chart. Be sure to compliment the students who recognize

$$\begin{array}{r} \underline{\quad 14} \\ - \underline{\quad 7} \\ \hline \underline{\quad 7} \end{array} \text{ B.}$$

$$\begin{array}{r} \underline{\quad 24} \\ - \underline{\quad 7} \\ \hline \underline{\quad 17} \end{array} \text{ D.}$$

$$\begin{array}{r} \underline{\quad 34} \\ - \underline{\quad 17} \\ \hline \underline{\quad 17} \end{array} \text{ F.}$$

$$\begin{array}{r} \underline{\quad 54} \\ - \underline{\quad 27} \\ \hline \underline{\quad 27} \end{array} \text{ H.}$$

this for their careful work and their willingness to place confidence in that work.

$$\begin{array}{r} \underline{\quad 7} \\ + \underline{\quad 8} \\ \hline \underline{\quad 15} \end{array} \text{ A.}$$

$$\begin{array}{r} \underline{\quad 17} \\ + \underline{\quad 8} \\ \hline \underline{\quad 25} \end{array} \text{ B.}$$

$$\begin{array}{r} \underline{\quad 27} \\ + \underline{\quad 8} \\ \hline \underline{\quad 35} \end{array} \text{ C.}$$

$$\begin{array}{r} \underline{\quad 27} \\ + \underline{\quad 28} \\ \hline \underline{\quad 55} \end{array} \text{ D.}$$

$$\begin{array}{r} \underline{\quad 15} \\ - \underline{\quad 8} \\ \hline \underline{\quad 7} \end{array} \text{ E.}$$

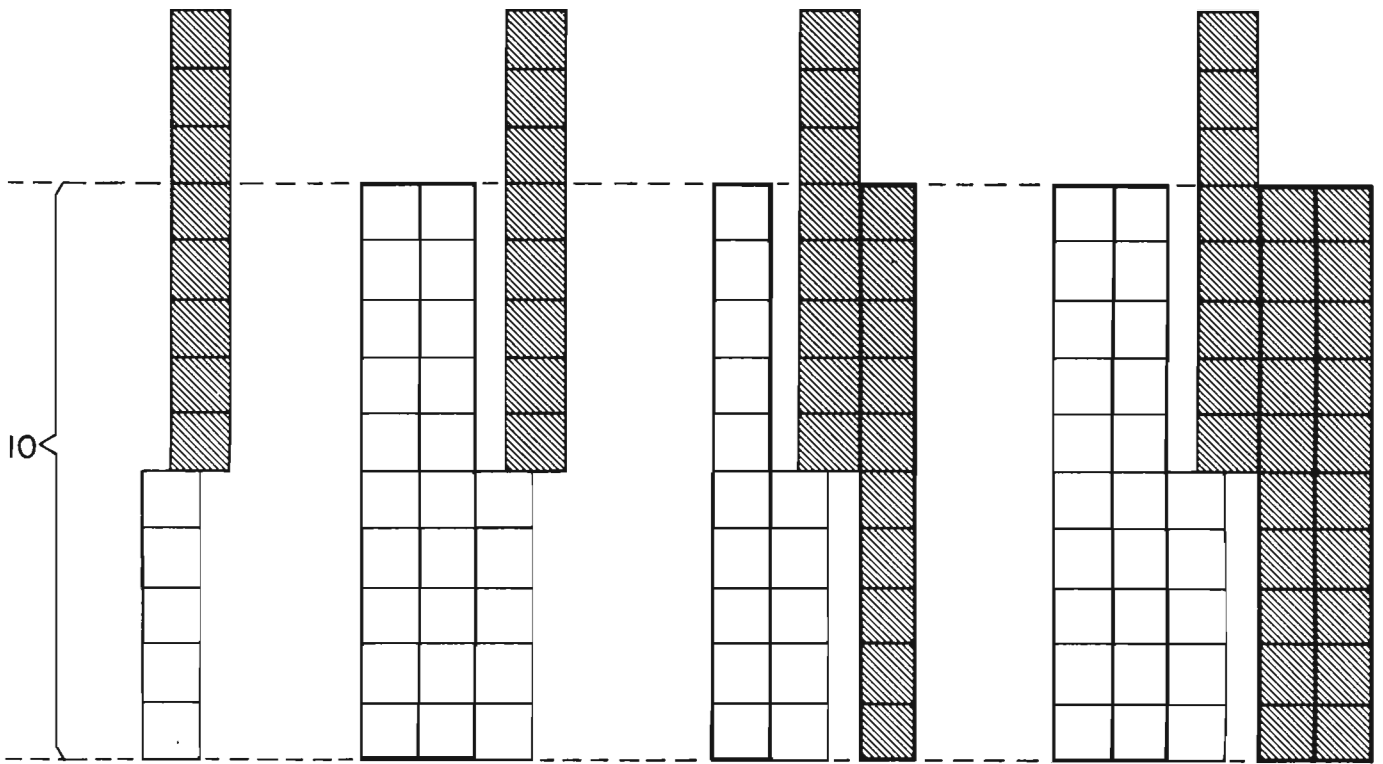
$$\begin{array}{r} \underline{\quad 25} \\ - \underline{\quad 8} \\ \hline \underline{\quad 17} \end{array} \text{ F.}$$

$$\begin{array}{r} \underline{\quad 25} \\ - \underline{\quad 18} \\ \hline \underline{\quad 7} \end{array} \text{ G.}$$

$$\begin{array}{r} \underline{\quad 35} \\ - \underline{\quad 18} \\ \hline \underline{\quad 17} \end{array} \text{ H.}$$

A.	B.	C.	D.
14	7	35	55
15	25	24	17

E.	F.	G.	H.
7	17	27	17
34	17	7	54



$$\begin{array}{r} \underline{\quad} 5 \\ + \quad 8 \\ \hline \underline{\quad} 13 \end{array} \text{ A.}$$

$$\begin{array}{r} \underline{\quad} 13 \\ - \quad 8 \\ \hline \underline{\quad} 5 \end{array} \text{ B.}$$

$$\begin{array}{r} \underline{\quad} 25 \\ + \quad 8 \\ \hline \underline{\quad} 33 \end{array} \text{ C.}$$

$$\begin{array}{r} \underline{\quad} 33 \\ - \quad 8 \\ \hline \underline{\quad} 25 \end{array} \text{ D.}$$

$$\begin{array}{r} \underline{\quad} 15 \\ + \quad 18 \\ \hline \underline{\quad} 33 \end{array} \text{ E.}$$

$$\begin{array}{r} \underline{\quad} 33 \\ - \quad 18 \\ \hline \underline{\quad} 15 \end{array} \text{ F.}$$

$$\begin{array}{r} \underline{\quad} 25 \\ + \quad 28 \\ \hline \underline{\quad} 53 \end{array} \text{ G.}$$

$$\begin{array}{r} \underline{\quad} 53 \\ - \quad 28 \\ \hline \underline{\quad} 25 \end{array} \text{ H.}$$

$$\begin{array}{r} \underline{\quad} 7 \\ + \quad 5 \\ \hline \underline{\quad} 12 \end{array} \text{ A.}$$

$$\begin{array}{r} \underline{\quad} 17 \\ + \quad 5 \\ \hline \underline{\quad} 22 \end{array} \text{ B.}$$

$$\begin{array}{r} \underline{\quad} 15 \\ + \quad 7 \\ \hline \underline{\quad} 22 \end{array} \text{ C.}$$

$$\begin{array}{r} \underline{\quad} 15 \\ + \quad 8 \\ \hline \underline{\quad} 23 \end{array} \text{ D.}$$

$$\begin{array}{r} \underline{\quad} 25 \\ - \quad 18 \\ \hline \underline{\quad} 7 \end{array} \text{ E.}$$

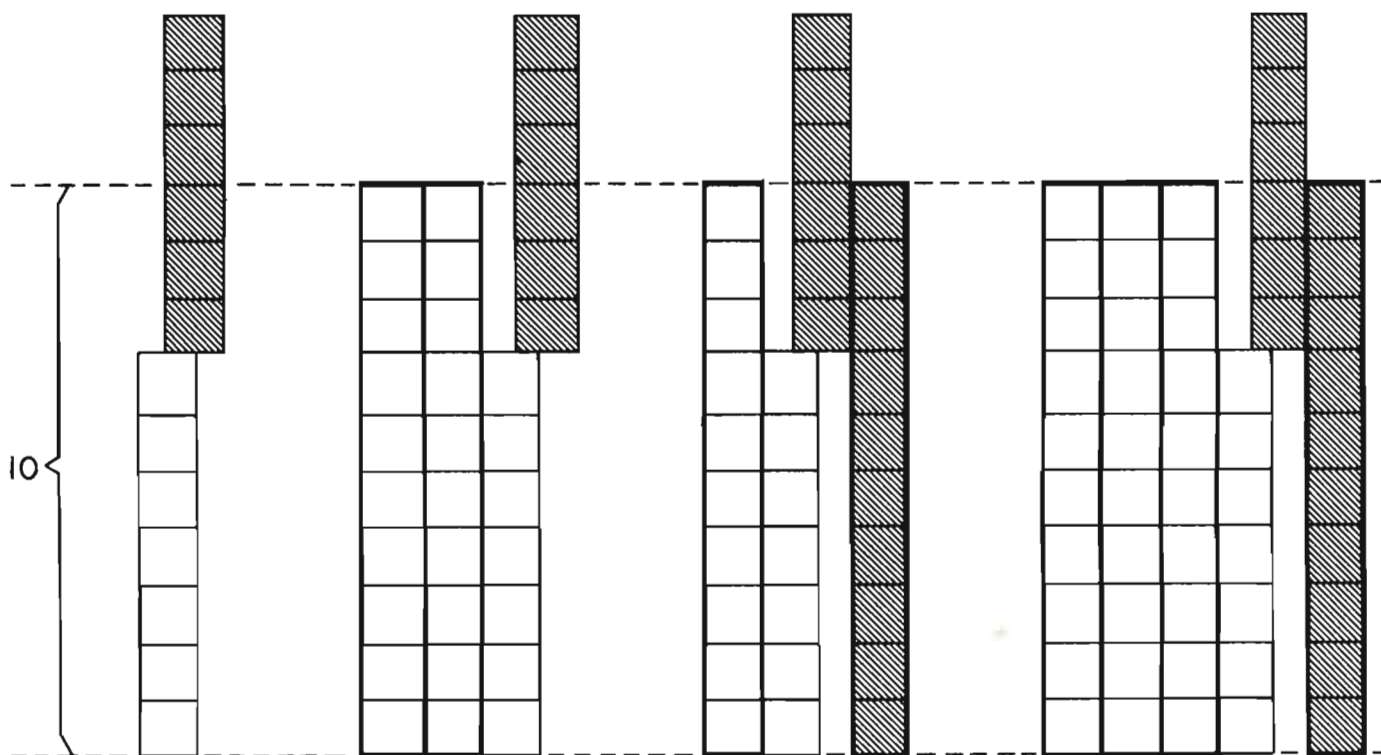
$$\begin{array}{r} \underline{\quad} 25 \\ - \quad 19 \\ \hline \underline{\quad} 6 \end{array} \text{ F.}$$

$$\begin{array}{r} \underline{\quad} 35 \\ - \quad 19 \\ \hline \underline{\quad} 16 \end{array} \text{ G.}$$

$$\begin{array}{r} \underline{\quad} 45 \\ - \quad 19 \\ \hline \underline{\quad} 26 \end{array} \text{ H.}$$

A.	B.	C.	D.
13	5	22	23
12	22	33	25

E.	F.	G.	H.
33	6	16	25
7	15	53	26



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

A.

$$\begin{array}{r} 27 \\ + 6 \\ \hline 33 \end{array}$$

C.

$$\begin{array}{r} 17 \\ + 16 \\ \hline 33 \end{array}$$

E.

$$\begin{array}{r} 37 \\ + 16 \\ \hline 53 \end{array}$$

G.

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

B.

$$\begin{array}{r} 33 \\ - 6 \\ \hline 27 \end{array}$$

D.

$$\begin{array}{r} 33 \\ - 16 \\ \hline 17 \end{array}$$

F.

$$\begin{array}{r} 53 \\ - 16 \\ \hline 37 \end{array}$$

H.

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

A.

$$\begin{array}{r} 19 \\ + 15 \\ \hline 34 \end{array}$$

B.

$$\begin{array}{r} 39 \\ + 5 \\ \hline 44 \end{array}$$

C.

$$\begin{array}{r} 25 \\ + 9 \\ \hline 34 \end{array}$$

D.

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

E.

$$\begin{array}{r} 24 \\ - 5 \\ \hline 19 \end{array}$$

F.

$$\begin{array}{r} 24 \\ - 6 \\ \hline 18 \end{array}$$

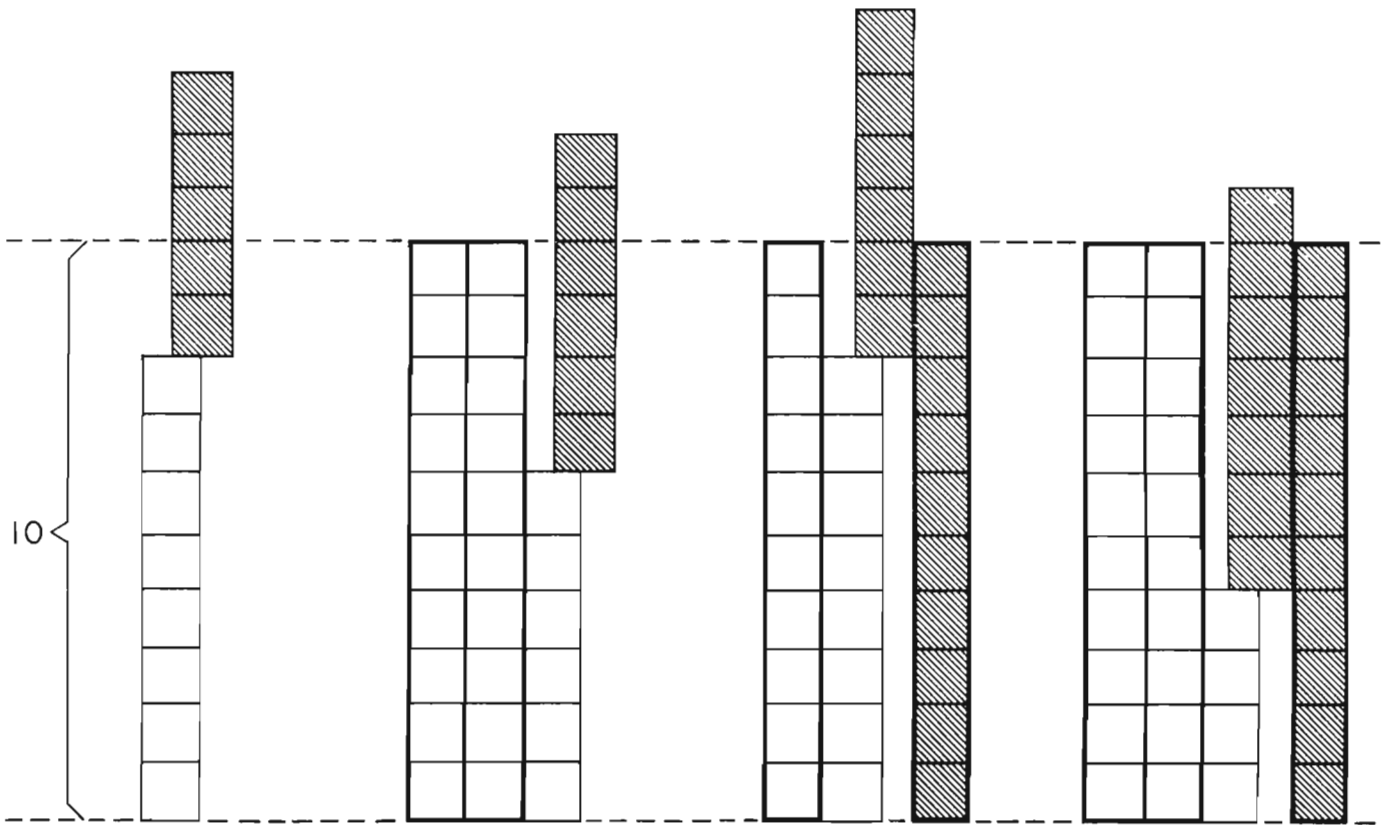
G.

$$\begin{array}{r} 24 \\ - 16 \\ \hline 8 \end{array}$$

H.

A.	B.	C.	D.
13	34	44	27
14	7	33	34

E.	F.	G.	H.
9	19	53	37
33	17	18	8



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

$$\begin{array}{r} 26 \\ + 6 \\ \hline 32 \\ \hline 32 \\ - 6 \\ \hline 26 \end{array}$$

$$\begin{array}{r} 18 \\ + 16 \\ \hline 34 \\ \hline 34 \\ - 16 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 24 \\ + 17 \\ \hline 41 \\ \hline 41 \\ - 17 \\ \hline 24 \end{array}$$

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

$$\begin{array}{r} 16 \\ + 26 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 16 \\ + 14 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 18 \\ + 21 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 41 \\ + 9 \\ \hline 50 \end{array}$$

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

$$\begin{array}{r} 26 \\ - 16 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 30 \\ - 14 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 39 \\ - 12 \\ \hline 27 \end{array}$$

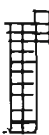
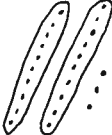

$$\begin{array}{r} 41 \\ - 15 \\ \hline 26 \end{array}$$



How do you feel?
¿Cómo se siente?

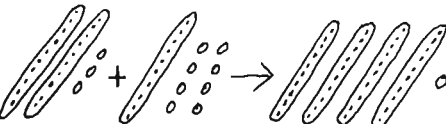
Dear Parent,

On the opposite side of this page you will see that your child is now doing sophisticated mathematics that requires the understanding of some important number relationships.

The representations on the page are in "place value" groupings - showing groups of tens and ones. Previous pages have given repeated opportunities to become familiar with representations of "place value." And with tensticks (your child can show you  how to make some at home together as done at school  - it's fun and easy!) and loose beans one can actually  "manipulate" the notion of place value, and the relationship between tens and ones in our number system becomes very clear and reasonable. With these manipulations and representations children can recognize the patterns by themselves and truly understand and use the shortcut to one-to-one counting that place value provides.

On this test your child has read the pictures and also translated them into the addition and subtraction problems they represent. To solve these problems "regrouping" (what we knew as carrying and borrowing) is involved. Here the representations "show" what is actually happening in this process - the "real," concrete relationship rather than a rule to be memorized.

It is also important to manipulate this with tensticks and beans. Quickly, here's how:

$$\begin{array}{r} 23 \\ +18 \\ \hline 41 \end{array}$$


Adding the ones (loose beans) first, when you get to ten, "trade" the ten ones for a tenstick and

mark that you have one more ten in the tens column. Record how many loose beans are left and the total of tensticks. Encourage your child to show you how it's done, and delight together in his/her solid understanding of so much mathematics.

Sincerely,

Friendly Number Squares

All rows and columns add to the same number.

7	0	5
2	4	6
3	8	1

6	1	5
3	4	5
3	7	2

5	2	5
4	4	4
3	6	3

7	1	7
5	5	5
3	9	3

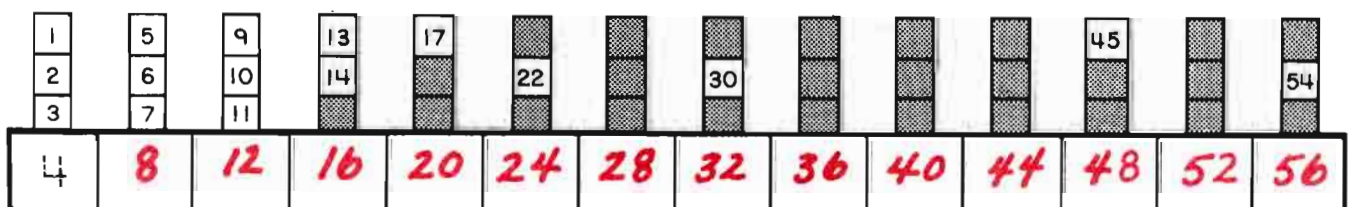
3	6	6
8	5	2
4	4	7

6	1	8
7	5	3
2	9	4

9	2	7
4	6	8
5	10	3

10	1	7
3	6	9
5	11	2

10	0	8
4	6	8
4	12	2



Cuadros de Números Amistosos

Todas las hileras y columnas suman el mismo número.

Friendly Number Squares

All rows and columns add to the same number.

1	3	4
2	4	2
5	1	2

3	3	3
2	3	4
4	3	2

1	3	6
7	2	1
2	5	3

3	2	6
3	7	1
5	2	4

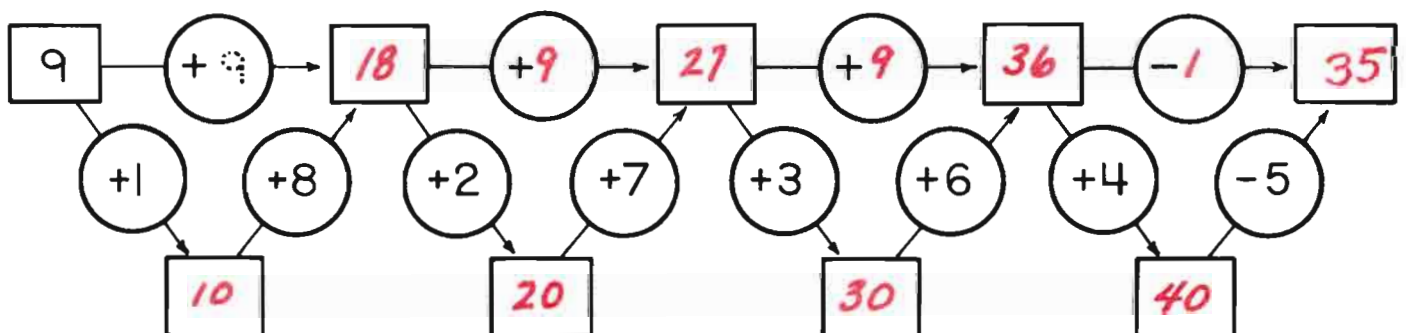
3	7	2
4	4	4
5	1	6

3	6	4
8	2	3
2	5	6

6	3	5
7	3	4
1	8	5

8	1	6
3	5	7
4	9	2

6	8	2
1	5	10
9	3	4



Cuadros de Números Amistosos.

Todas las hileras y columnas suman el mismo número.

Friendly Number Squares

All rows and columns add to the same number.

Cuadros de Números Amistosos

Todas las hileras y columnas suman el mismo número

9	2	7
4	6	8
5	10	3

8	7	3
1	6	11
9	5	4

3	12	3
6	6	6
9	0	9

12	1	8
3	7	11
6	13	2

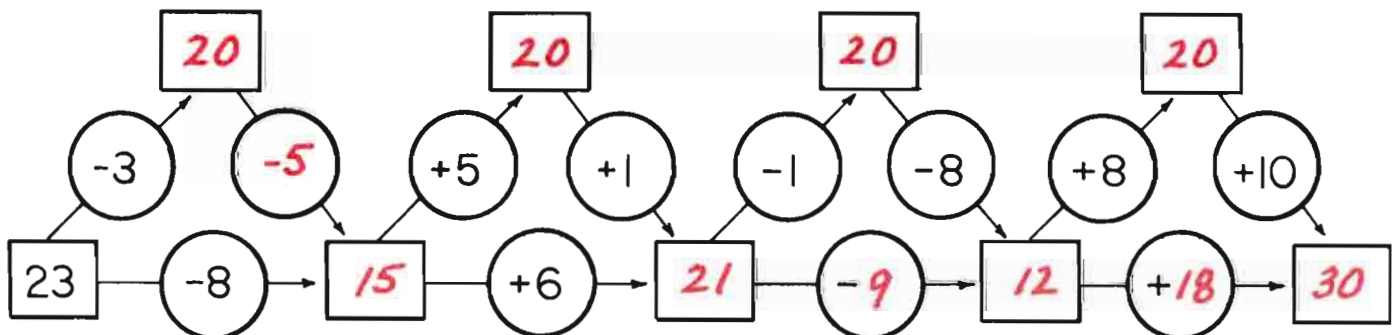
9	9	3
1	7	13
11	5	5

3	12	6
10	7	4
8	2	11

11	3	10
7	8	9
6	13	5

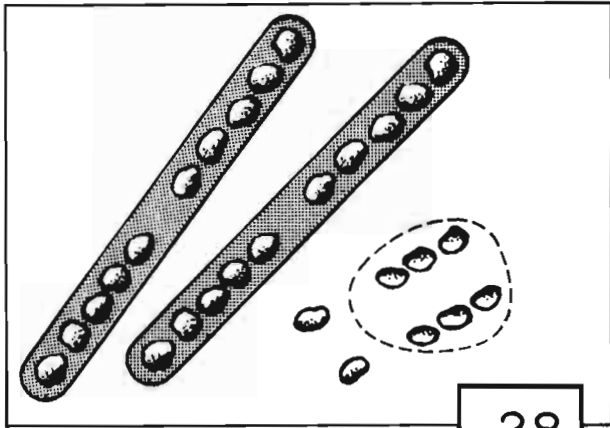
14	0	10
4	8	12
6	16	2

10	11	3
1	8	15
13	5	6



Sometimes we trade . . .
a 10-stick for 10 loose beans

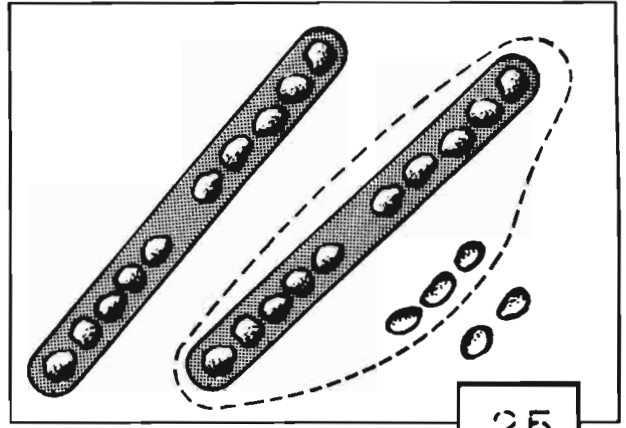
A veces cambiamos . . .
un palo de 10 por 10 frijoles sueltos



$$\begin{array}{r} 28 \\ - 6 \\ \hline 22 \end{array}$$

This should be preceded by some trading activities with 10-sticks and loose beans.

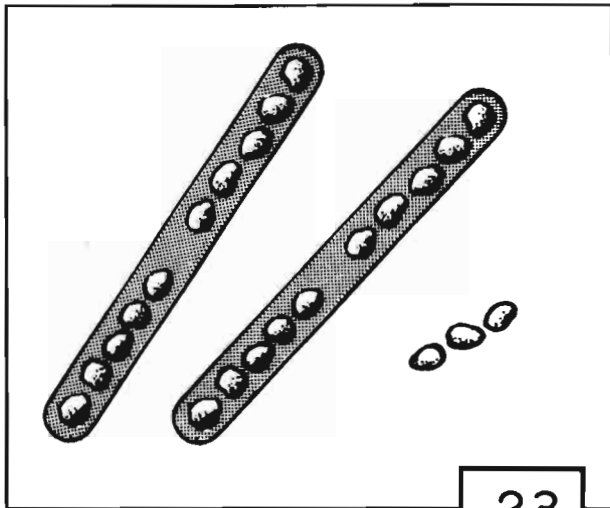
A.



$$\begin{array}{r} 25 \\ - 13 \\ \hline 12 \end{array}$$

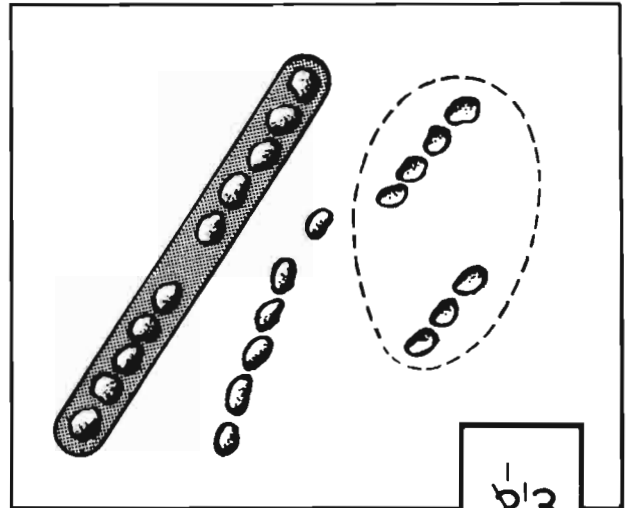
See also: D&P 110A-110D

B.



Please take 7 away
Favor de quitar 7

$$\begin{array}{r} 23 \\ - 7 \\ \hline 16 \end{array}$$



1 ten-stick and 13 loose beans
Un palo de 10 y 13 frijoles sueltos

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

$$\begin{array}{r} 24 \\ - 7 \\ \hline 17 \end{array}$$

A.

$$\begin{array}{r} 26 \\ - 7 \\ \hline 19 \end{array}$$

B.

$$\begin{array}{r} 28 \\ - 7 \\ \hline 21 \end{array}$$

C.

$$\begin{array}{r} 33 \\ - 7 \\ \hline 26 \end{array}$$

D.

$$\begin{array}{r} 33 \\ - 17 \\ \hline 16 \end{array}$$

E.

A.	B.	C.	D.	E.
17	12	21	26	25
22	19	18	17	16

Sometimes we trade

A veces cambiamos

a 10-stick for 10 loose beans

un palo de 10 por 10 frijoles sueltos

Diagram A shows two sticks of 10 beans each and 7 loose beans. Below the diagram is a subtraction problem:
$$\begin{array}{r} 27 \\ - 6 \\ \hline 21 \end{array}$$
 A.

Diagram B shows three sticks of 10 beans each and 5 loose beans. Below the diagram is a subtraction problem:
$$\begin{array}{r} 35 \\ - 23 \\ \hline 12 \end{array}$$
 B.

Diagram C shows three sticks of 10 beans each and 4 loose beans. Below the diagram is a subtraction problem:
$$\begin{array}{r} 34 \\ - 6 \\ \hline 28 \end{array}$$
 C.



Diagram D shows two sticks of 10 beans each, one stick of 4 beans, and 4 loose beans. Below the diagram is a subtraction problem:
$$\begin{array}{r} 34 \\ - 6 \\ \hline 28 \end{array}$$
 D.

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

$$\begin{array}{r} 27 \\ - 17 \\ \hline 10 \end{array}$$
 F.

$$\begin{array}{r} 27 \\ - 18 \\ \hline 9 \end{array}$$
 G.

$$\begin{array}{r} 24 \\ - 6 \\ \hline 18 \end{array}$$
 A.

$$\begin{array}{r} 24 \\ - 16 \\ \hline 8 \end{array}$$
 B.

$$\begin{array}{r} 44 \\ - 26 \\ \hline 18 \end{array}$$
 C.

$$\begin{array}{r} 34 \\ - 11 \\ \hline 23 \end{array}$$
 D.

$$\begin{array}{r} 34 \\ - 14 \\ \hline 20 \end{array}$$
 E.

$$\begin{array}{r} 34 \\ - 15 \\ \hline 19 \end{array}$$
 F.

$$\begin{array}{r} 34 \\ - 25 \\ \hline 9 \end{array}$$
 G.

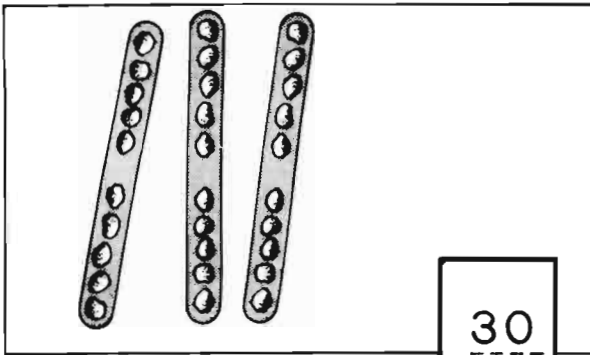
A.	B.	C.	D.	E.	F.	G.
21	8	18	28	27	10	13
18	12	28	23	20	19	9

Sometimes we trade

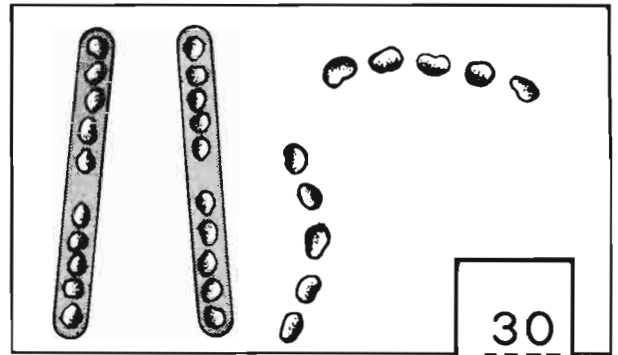
a 10-stick for 10 loose beans

A veces cambiamos

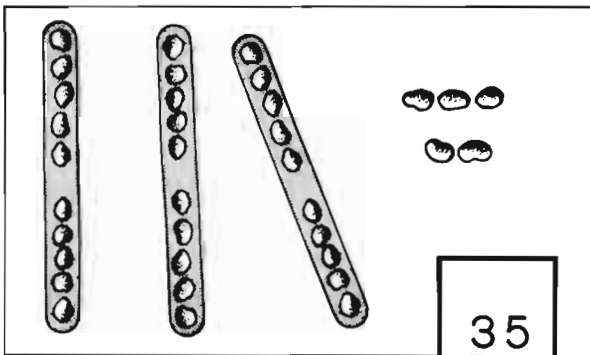
un palo de 10 por 10 frijoles sueltos



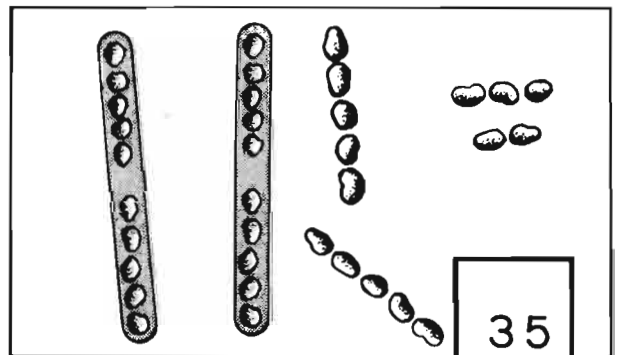
$$\begin{array}{r} 30 \\ - 7 \\ \hline 23 \end{array}$$



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



$$\begin{array}{r} 35 \\ - 17 \\ \hline 18 \end{array}$$



$$\begin{array}{r} 35 \\ - 17 \\ \hline 18 \end{array}$$



$$\begin{array}{r} \overset{3}{\cancel{4}}0 \\ - 3 \\ \hline 37 \end{array}$$

$$\begin{array}{r} 50 \\ - 3 \\ \hline 47 \end{array}$$

$$\begin{array}{r} 40 \\ - 17 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 50 \\ - 20 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 60 \\ - 29 \\ \hline 31 \end{array}$$

$$\begin{array}{r} 39 \\ - 17 \\ \hline 22 \end{array}$$

$$\begin{array}{r} \overset{3}{\cancel{4}}3 \\ - 27 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 53 \\ - 17 \\ \hline 36 \end{array}$$

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

$$\begin{array}{r} 70 \\ - 35 \\ \hline 35 \end{array}$$

A.	B.	C.	D.	E.	F.	G.
23	31	22	18	36	47	23
30	23	18	16	37	44	35

Sometimes we trade
a 10-stick for 10 loose beans

A veces cambiamos
un palo de 10 por 10 frijoles sueltos

$$\begin{array}{r} 45 \\ -13 \\ \hline 32 \end{array}$$

A.

$$\begin{array}{r} 37 \\ -17 \\ \hline 20 \end{array}$$

B.

$$\begin{array}{r} 26 \\ -18 \\ \hline 8 \end{array}$$

C.

$$\begin{array}{r} 26 \\ -18 \\ \hline 8 \end{array}$$

D.

$$\begin{array}{r} 26 \\ -19 \\ \hline 7 \end{array}$$

E.

$$\begin{array}{r} 36 \\ -19 \\ \hline 17 \end{array}$$

F.

$$\begin{array}{r} 56 \\ -19 \\ \hline 37 \end{array}$$

G.

$$\begin{array}{r} 76 \\ -29 \\ \hline 47 \end{array}$$

A.

$$\begin{array}{r} 50 \\ -25 \\ \hline 25 \end{array}$$

B.

$$\begin{array}{r} 75 \\ -50 \\ \hline 25 \end{array}$$

C.

$$\begin{array}{r} 49 \\ -16 \\ \hline 33 \end{array}$$

D.

$$\begin{array}{r} 50 \\ -17 \\ \hline 33 \end{array}$$

E.

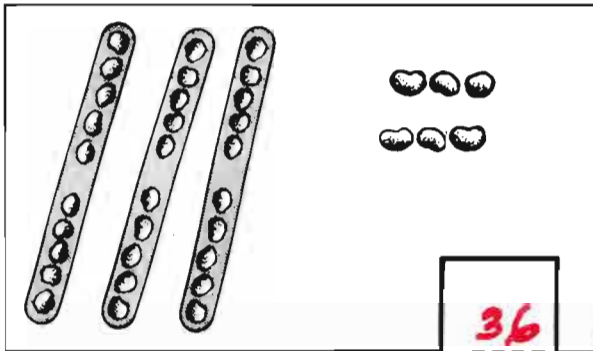
$$\begin{array}{r} 40 \\ -23 \\ \hline 17 \end{array}$$

F.

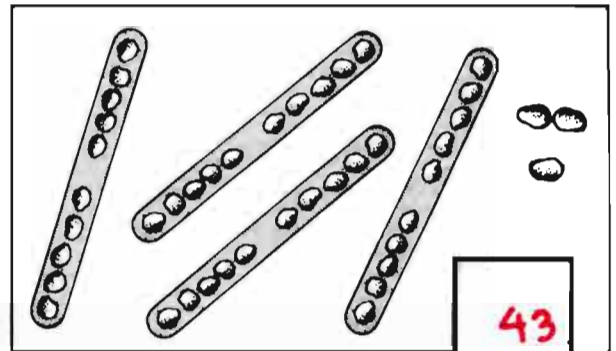
$$\begin{array}{r} 60 \\ -40 \\ \hline 20 \end{array}$$

G.

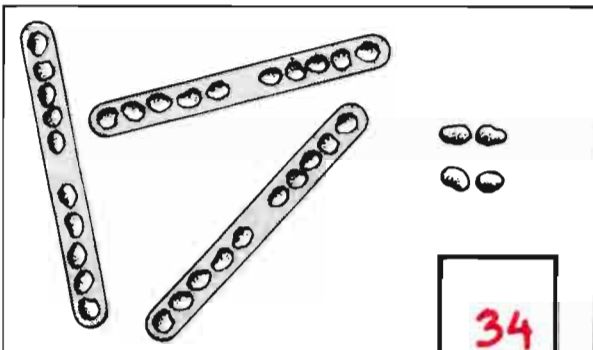
A.	B.	C.	D.	E.	F.	G.
47	25	8	33	7	17	20
32	20	25	8	33	25	37



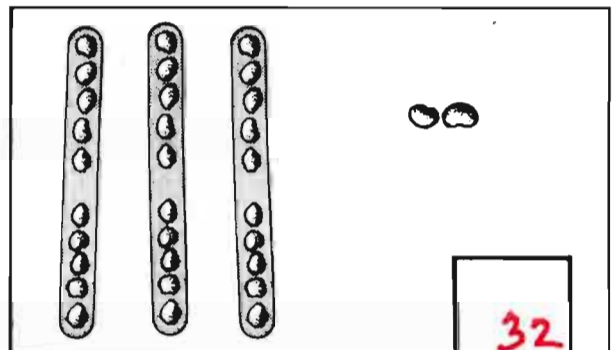
$$\begin{array}{r} 36 \\ - 14 \\ \hline 22 \end{array}$$



$$\begin{array}{r} 43 \\ - 23 \\ \hline 20 \end{array}$$



$$\begin{array}{r} 34 \\ - 19 \\ \hline 15 \end{array}$$



$$\begin{array}{r} 32 \\ - 7 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 25 \\ - 8 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 35 \\ - 8 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 35 \\ - 18 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 65 \\ - 28 \\ \hline 37 \end{array}$$

$$\begin{array}{r} 50 \\ - 25 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 75 \\ - 25 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 38 \\ - 17 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 40 \\ - 17 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 40 \\ - 25 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 50 \\ - 41 \\ \hline 9 \end{array}$$



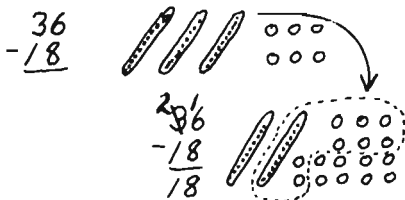
How do you feel?
¿Cómo se siente?

Dear Parent,

From the exercise on the other side you see now that your child has been doing subtraction problems with "regrouping" (borrowing), using tensticks and loose beans as we discussed for addition in the previous letter.

The second half of this test shows no pictures for the problems, but it's still fine to use sticks or pictures if your child needs to. All we do is bypass understanding and confidence if we don't allow for sufficient time at the manipulative and representational levels. And "sufficient" time varies greatly with each individual child. When we push a child to work strictly at the abstract level we encourage reliance on a memorized rule, productive only in the narrow situation in which it applies - and only if one remembers both the rule and the special conditions in which it produces "right answers."

Maybe your child would like to show you how subtraction with regrouping is done with tensticks and beans. Or perhaps help is needed and you can do some together. You have to trade



one tenstick for 10 loose beans, mark on the notation that you now have only 2 tens and complete the subtraction, working with the ones first.

This is not an easy concept for many children to deal with. Your friendly support is welcomed and appreciated.

Sincerely,

Sometimes we trade . . .
 . . . 10 pennies for 1 dime

A veces cambiamos . . .
 . . . 10 centavos por 1 diez

Real coins are often useful for introducing this series.

(10¢)	(1¢)	¢
1	6	(16)
+ 1	5	(15)
2	11	(31) A.

→

(10¢)	(1¢)	¢
1	6	(16)
+ 1	5	(15)
3	1	(31) A.

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">(10¢)</td> <td style="text-align: center;">(1¢)</td> <td style="text-align: center;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">2</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">5</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">(25)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">+ 2</td> <td style="border-bottom: 1px solid black; text-align: center;">6</td> <td style="border-bottom: 1px solid black; text-align: center;">(26)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">4</td> <td style="border-bottom: 1px solid black; text-align: center;">11</td> <td style="border-bottom: 1px solid black; text-align: center;">(51) B.</td> </tr> </table>	(10¢)	(1¢)	¢	2	5	(25)	+ 2	6	(26)	4	11	(51) B.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">(10¢)</td> <td style="text-align: center;">(1¢)</td> <td style="text-align: center;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">1</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">7</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">(17)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">+ 1</td> <td style="border-bottom: 1px solid black; text-align: center;">3</td> <td style="border-bottom: 1px solid black; text-align: center;">(13)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">2</td> <td style="border-bottom: 1px solid black; text-align: center;">10</td> <td style="border-bottom: 1px solid black; text-align: center;">(30) C.</td> </tr> </table>	(10¢)	(1¢)	¢	1	7	(17)	+ 1	3	(13)	2	10	(30) C.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">(10¢)</td> <td style="text-align: center;">(1¢)</td> <td style="text-align: center;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">2</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">5</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">(25)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">+ 1</td> <td style="border-bottom: 1px solid black; text-align: center;">8</td> <td style="border-bottom: 1px solid black; text-align: center;">(18)</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">3</td> <td style="border-bottom: 1px solid black; text-align: center;">13</td> <td style="border-bottom: 1px solid black; text-align: center;">(43) D.</td> </tr> </table>	(10¢)	(1¢)	¢	2	5	(25)	+ 1	8	(18)	3	13	(43) D.
(10¢)	(1¢)	¢																																				
2	5	(25)																																				
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(10¢)	(1¢)	¢																																				
2	5	(25)																																				
+ 1	8	(18)																																				
3	13	(43) D.																																				

A.	B.	C.	D.
31	43	41	43
22	51	30	34

Sometimes we trade . . .
 . . . 10 pennies for 1 dime

A veces cambiamos . . .
 . . . 10 centavos por 1 diez

$$\begin{array}{r} 26 \\ + 24 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 1 \\ 26 \\ + 24 \\ \hline 50 \end{array}$$

10¢	1¢	¢
2	6	(26)
+	2	(24)
4	10	(50)

B.

10¢	1¢	¢
2	5	(25)
+	2	(25)
4	10	(50)

C.

10¢	1¢	¢
2	6	(26)
+	2	(26)
4	12	(52)

D.

10¢	1¢	¢
3	1	(31)
+	2	(39)
5	10	(60)

E.

10¢	1¢	¢
3	5	(35)
+	2	(29)
5	14	(64)

F.

A.	B.	C.
48	49	51
50	50	50
D.	E.	F.
52	49	64
40	60	58

Sometimes we trade . . .
 . . . 10 pennies for 1 dime

A veces cambiamos . . .
 . . . 10 centavos por 1 diez

36
+ 27

63

→


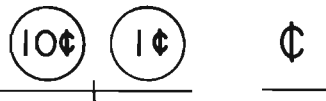

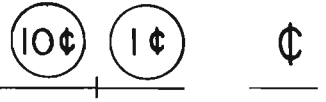
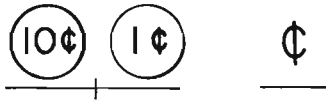

36
+ 27

63

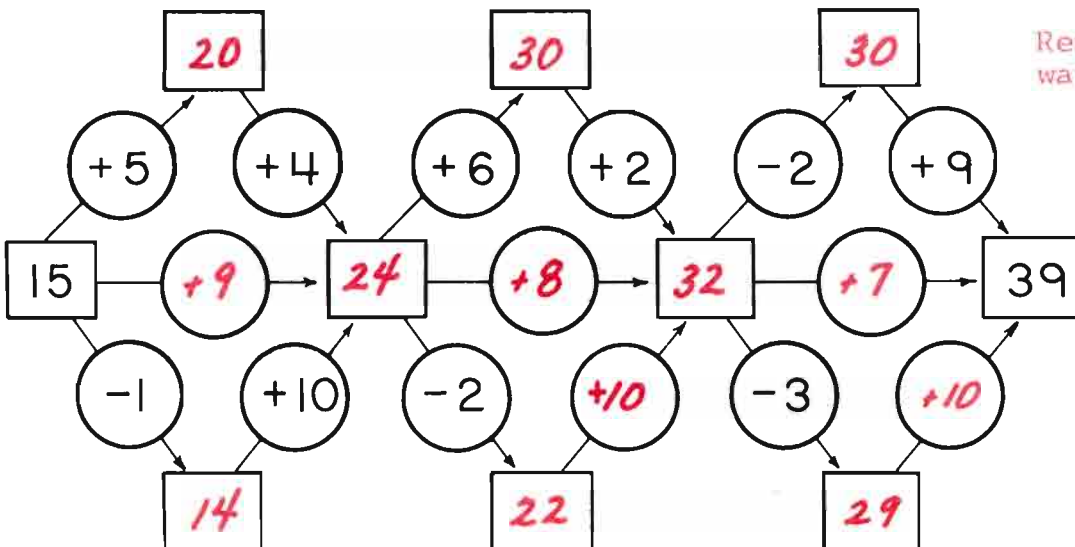
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">10¢</td> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1¢</td> <td style="border: 1px solid black; padding: 2px;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">3</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">6</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">(36)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">+ 2</td> <td style="border-bottom: 1px solid black;">7</td> <td style="border-bottom: 1px solid black;">(27)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">5</td> <td style="border-bottom: 1px solid black;">13</td> <td style="border-bottom: 1px solid black;">(63)</td> </tr> </table> <p>B.</p>	10¢	1¢	¢	3	6	(36)	+ 2	7	(27)	5	13	(63)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">10¢</td> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1¢</td> <td style="border: 1px solid black; padding: 2px;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">1</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">9</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">(19)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">+ 3</td> <td style="border-bottom: 1px solid black;">9</td> <td style="border-bottom: 1px solid black;">(39)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">4</td> <td style="border-bottom: 1px solid black;">18</td> <td style="border-bottom: 1px solid black;">(58)</td> </tr> </table> <p>C.</p>	10¢	1¢	¢	1	9	(19)	+ 3	9	(39)	4	18	(58)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">10¢</td> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1¢</td> <td style="border: 1px solid black; padding: 2px;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">3</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">8</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">(38)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">+ 2</td> <td style="border-bottom: 1px solid black;">4</td> <td style="border-bottom: 1px solid black;">(24)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">5</td> <td style="border-bottom: 1px solid black;">12</td> <td style="border-bottom: 1px solid black;">(62)</td> </tr> </table> <p>D.</p>	10¢	1¢	¢	3	8	(38)	+ 2	4	(24)	5	12	(62)												
10¢	1¢	¢																																																
3	6	(36)																																																
+ 2	7	(27)																																																
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10¢	1¢	¢																																																
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4	18	(58)																																																
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<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">10¢</td> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1¢</td> <td style="border: 1px solid black; padding: 2px;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">2</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">5</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">(25)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">+ 3</td> <td style="border-bottom: 1px solid black;">4</td> <td style="border-bottom: 1px solid black;">(34)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">5</td> <td style="border-bottom: 1px solid black;">9</td> <td style="border-bottom: 1px solid black;">(59)</td> </tr> </table> <p>E.</p>	10¢	1¢	¢	2	5	(25)	+ 3	4	(34)	5	9	(59)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">10¢</td> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1¢</td> <td style="border: 1px solid black; padding: 2px;">¢</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">2</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">9</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">(29)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">+ 0</td> <td style="border-bottom: 1px solid black;">8</td> <td style="border-bottom: 1px solid black;">(8)</td> </tr> <tr> <td style="border-bottom: 1px solid black;">2</td> <td style="border-bottom: 1px solid black;">17</td> <td style="border-bottom: 1px solid black;">(37)</td> </tr> </table> <p>F.</p>	10¢	1¢	¢	2	9	(29)	+ 0	8	(8)	2	17	(37)	<table style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="border: 1px solid black; padding: 2px;">A.</td> <td style="border: 1px solid black; padding: 2px;">B.</td> <td style="border: 1px solid black; padding: 2px;">C.</td> <td style="border: 1px solid black; padding: 2px;">D.</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">63</td> <td style="border: 1px solid black; padding: 2px;">53</td> <td style="border: 1px solid black; padding: 2px;">59</td> <td style="border: 1px solid black; padding: 2px;">62</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">37</td> <td style="border: 1px solid black; padding: 2px;">63</td> <td style="border: 1px solid black; padding: 2px;">58</td> <td style="border: 1px solid black; padding: 2px;">54</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">E.</td> <td style="border: 1px solid black; padding: 2px;">F.</td> <td colspan="2"></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">11</td> <td style="border: 1px solid black; padding: 2px;">37</td> <td colspan="2"></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">59</td> <td style="border: 1px solid black; padding: 2px;">21</td> <td colspan="2"></td> </tr> </table>	A.	B.	C.	D.	63	53	59	62	37	63	58	54	E.	F.			11	37			59	21		
10¢	1¢	¢																																																
2	5	(25)																																																
+ 3	4	(34)																																																
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Sometimes we trade
 . . . 10 pennies for 1 dime

A veces cambiamos
 . . . 10 centavos por 1 diez

 $\begin{array}{r} 4 + 5 \\ + 1 + 5 \\ \hline 5 + 10 \end{array}$ <p>(45) (15) (60) A.</p>	 $\begin{array}{r} 3 + 4 \\ + 2 + 9 \\ \hline 5 + 13 \end{array}$ <p>(34) (29) (63) B.</p>	 $\begin{array}{r} 4 + 6 \\ + 1 + 2 \\ \hline 5 + 8 \end{array}$ <p>(46) (12) (58) C.</p>
 $\begin{array}{r} 4 + 8 \\ + + 8 \\ \hline 4 + 16 \end{array}$ <p>(48) (8) (56) D.</p>	 $\begin{array}{r} 1 + 3 \\ + 5 + 0 \\ \hline 6 + 3 \end{array}$ <p>(13) (50) (63) E.</p>	 $\begin{array}{r} 2 + 7 \\ + 4 + 3 \\ \hline 6 + 10 \end{array}$ <p>(27) (43) (70) F.</p>

$\begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array}$ A.	$\begin{array}{r} 29 \\ + 7 \\ \hline 36 \end{array}$ B.	$\begin{array}{r} 29 \\ + 27 \\ \hline 56 \end{array}$ C.	$\begin{array}{r} 49 \\ + 37 \\ \hline 86 \end{array}$ D.	$\begin{array}{r} 109 \\ + 7 \\ \hline 116 \end{array}$ E.	$\begin{array}{r} 109 \\ + 37 \\ \hline 146 \end{array}$ F.
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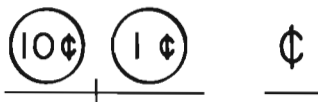
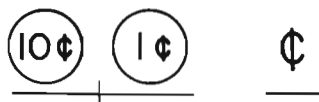
Remind children to watch the arrows!

A.	B.	C.
60	36	56
16	63	58

D.	E.	F.
86	63	146
56	116	70

Sometimes we trade
 . . . 10 pennies for 1 dime

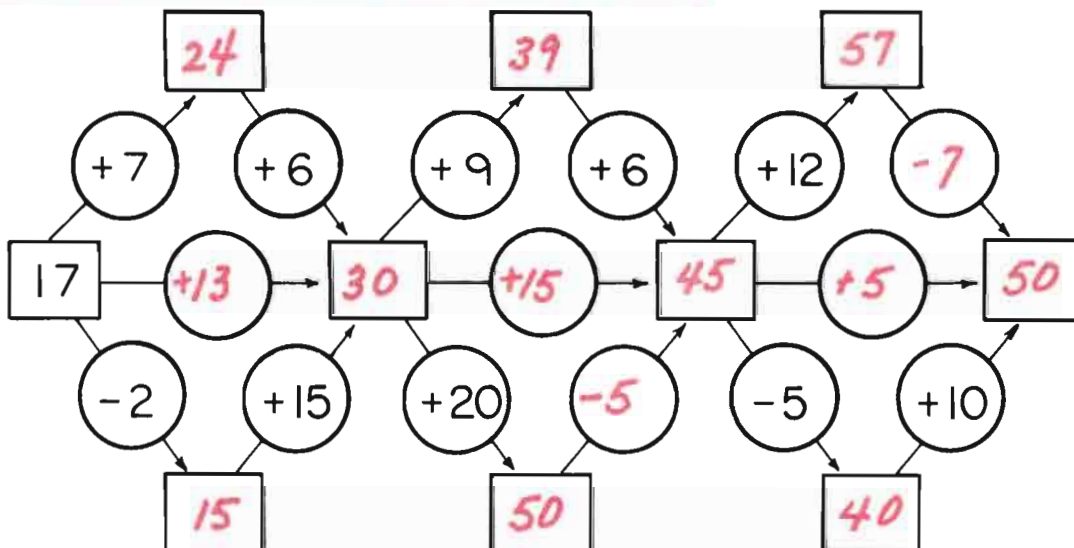
A veces cambiamos
 . . . 10 centavos por 1 diez

 $\begin{array}{r} 37 \\ + 37 \\ \hline 74 \end{array}$ <p>A.</p>	 $\begin{array}{r} 29 \\ + 41 \\ \hline 70 \end{array}$ <p>B.</p>	 $\begin{array}{r} 14 \\ + 73 \\ \hline 87 \end{array}$ <p>C.</p>
 $\begin{array}{r} 46 \\ + 19 \\ \hline 65 \end{array}$ <p>D.</p>	 $\begin{array}{r} 34 \\ + 65 \\ \hline 99 \end{array}$ <p>E.</p>	 $\begin{array}{r} 100 \\ + 18 \\ \hline 118 \end{array}$ <p>F.</p>

The answer to the first "A" example does not appear in its proper place in the answer chart.

$\begin{array}{r} 15 \\ + 18 \\ \hline 33 \end{array}$ A.	$\begin{array}{r} 65 \\ + 28 \\ \hline 93 \end{array}$ B.	$\begin{array}{r} 38 \\ + 25 \\ \hline 63 \end{array}$ C.	$\begin{array}{r} 125 \\ + 8 \\ \hline 133 \end{array}$ D.	$\begin{array}{r} 125 \\ + 38 \\ \hline 163 \end{array}$ E.	$\begin{array}{r} 125 \\ + 13 \\ \hline 138 \end{array}$ F.
---	---	---	--	---	---

Again, compliment those students who have sufficient confidence in their own work to question the answer chart.



A.	B.	C.
33	70	87
54	93	63

D.	E.	F.
65	99	138
133	163	118

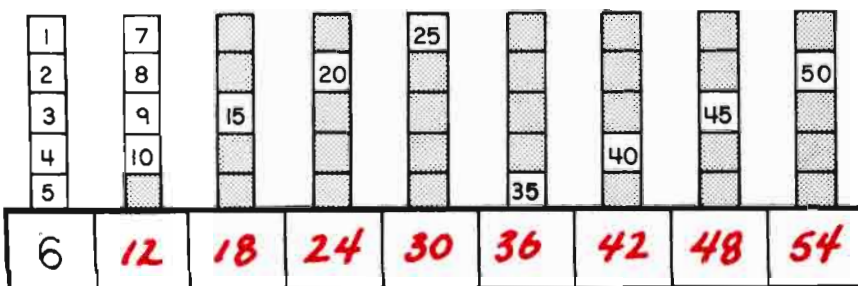
Sometimes we trade
 . . . 10 pennies for 1 dime

A Veces Cambiamos
 . . . 10 centavos por 1 diez

¢ <hr style="width: 100%;"/> $\begin{array}{r} 5 \quad 0 \quad (50) \\ + 5 \quad 0 \quad (50) \\ \hline 10 \quad 0 \quad (100) \end{array}$ <p style="text-align: right;">A.</p>	¢ <hr style="width: 100%;"/> $\begin{array}{r} 5 \quad 3 \quad (53) \\ + 5 \quad 4 \quad (54) \\ \hline 10 \quad 7 \quad (107) \end{array}$ <p style="text-align: right;">B.</p>	¢ <hr style="width: 100%;"/> $\begin{array}{r} 5 \quad 3 \quad (53) \\ + 5 \quad 7 \quad (57) \\ \hline 10 \quad 10 \quad (110) \end{array}$ <p style="text-align: right;">C.</p>
¢ <hr style="width: 100%;"/> $\begin{array}{r} 4 \quad 5 \quad (45) \\ + 4 \quad 5 \quad (45) \\ \hline 8 \quad 10 \quad (90) \end{array}$ <p style="text-align: right;">D.</p>	¢ <hr style="width: 100%;"/> $\begin{array}{r} 4 \quad 5 \quad (45) \\ + 5 \quad 5 \quad (55) \\ \hline 9 \quad 10 \quad (100) \end{array}$ <p style="text-align: right;">E.</p>	¢ <hr style="width: 100%;"/> $\begin{array}{r} 7 \quad 6 \quad (76) \\ + 3 \quad 8 \quad (38) \\ \hline 10 \quad 14 \quad (114) \end{array}$ <p style="text-align: right;">F.</p>

$\begin{array}{r} 40 \\ + 60 \\ \hline 100 \end{array}$ G.	$\begin{array}{r} 45 \\ + 60 \\ \hline 105 \end{array}$ H.	$\begin{array}{r} 45 \\ + 65 \\ \hline 110 \end{array}$ I.	$\begin{array}{r} 45 \\ + 70 \\ \hline 115 \end{array}$ J.	$\begin{array}{r} 45 \\ + 75 \\ \hline 120 \end{array}$ A.	$\begin{array}{r} 45 \\ + 95 \\ \hline 140 \end{array}$ B.
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$\begin{array}{r} 36 \\ + 54 \\ \hline 90 \end{array}$ C.	$\begin{array}{r} 36 \\ + 64 \\ \hline 100 \end{array}$ D.	$\begin{array}{r} 36 \\ + 74 \\ \hline 110 \end{array}$ E.	$\begin{array}{r} 36 \\ + 47 \\ \hline 83 \end{array}$ F.	$\begin{array}{r} 36 \\ + 67 \\ \hline 103 \end{array}$ G.	$\begin{array}{r} 36 \\ + 77 \\ \hline 113 \end{array}$ H.
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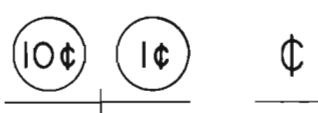
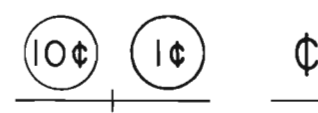
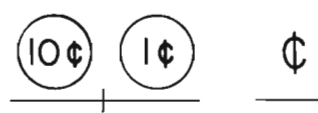
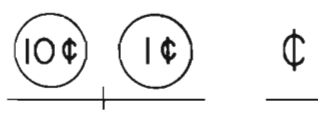
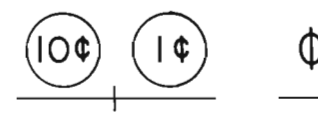
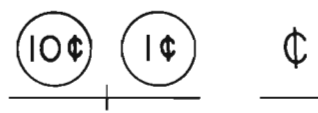


A.	B.	C.	D.	E.
100	140	90	90	100
120	107	110	100	110

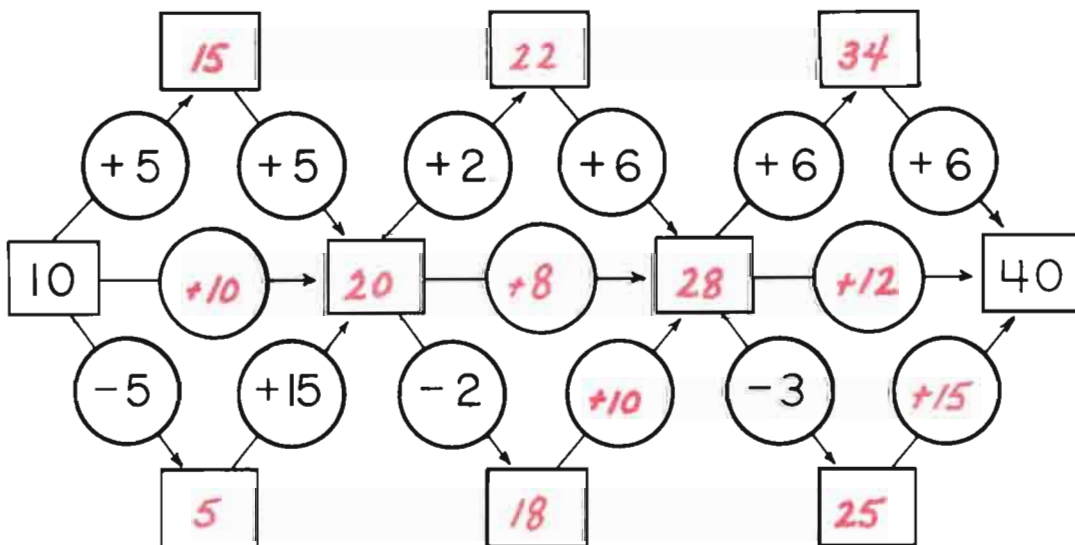
F.	G.	H.	I.	J.
83	103	105	54	115
114	100	113	110	100

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 $\begin{array}{r} 32 \\ + 17 \\ \hline 49 \end{array}$ <p>A.</p>	 $\begin{array}{r} 15 \\ + 15 \\ \hline 30 \end{array}$ <p>B.</p>	 $\begin{array}{r} 45 \\ + 45 \\ \hline 90 \end{array}$ <p>C.</p>
 $\begin{array}{r} 52 \\ + 8 \\ \hline 60 \end{array}$ <p>D.</p>	 $\begin{array}{r} 40 \\ + 23 \\ \hline 63 \end{array}$ <p>E.</p>	 $\begin{array}{r} 13 \\ + 27 \\ \hline 40 \end{array}$ <p>F.</p>

$\begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array}$ A.	$\begin{array}{r} 28 \\ + 6 \\ \hline 34 \end{array}$ B.	$\begin{array}{r} 28 \\ + 26 \\ \hline 54 \end{array}$ C.	$\begin{array}{r} 46 \\ + 38 \\ \hline 84 \end{array}$ D.	$\begin{array}{r} 108 \\ + 6 \\ \hline 114 \end{array}$ E.	$\begin{array}{r} 106 \\ + 38 \\ \hline 144 \end{array}$ F.
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A.	B.	C.
49	34	90
14	30	54

D.	E.	F.
60	114	144
84	63	40

Sometimes we trade
 . . . 10 pennies for 1 dime

A veces cambiamos
 . . . 10 centavos por 1 diez

$\begin{array}{r} 50 \\ + 75 \\ \hline 125 \end{array}$ <p style="text-align: right;">A.</p>	$\begin{array}{r} 84 \\ + 53 \\ \hline 137 \end{array}$ <p style="text-align: right;">B.</p>	$\begin{array}{r} 87 \\ + 57 \\ \hline 144 \end{array}$ <p style="text-align: right;">C.</p>
$\begin{array}{r} 85 \\ + 75 \\ \hline 160 \end{array}$ <p style="text-align: right;">D.</p>	$\begin{array}{r} 98 \\ + 98 \\ \hline 196 \end{array}$ <p style="text-align: right;">E.</p>	$\begin{array}{r} 105 \\ + 105 \\ \hline 210 \end{array}$ <p style="text-align: right;">F.</p>

$\begin{array}{r} 50 \\ + 50 \\ \hline 100 \end{array}$ G.	$\begin{array}{r} 60 \\ + 60 \\ \hline 120 \end{array}$ H.	$\begin{array}{r} 65 \\ + 65 \\ \hline 130 \end{array}$ I.	$\begin{array}{r} 75 \\ + 75 \\ \hline 150 \end{array}$ J.	$\begin{array}{r} 85 \\ + 85 \\ \hline 170 \end{array}$ A.	$\begin{array}{r} 95 \\ + 95 \\ \hline 190 \end{array}$ B.
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$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$ C.	$\begin{array}{r} 125 \\ + 125 \\ \hline 250 \end{array}$ D.	$\begin{array}{r} 150 \\ + 150 \\ \hline 300 \end{array}$ E.	$\begin{array}{r} 155 \\ + 155 \\ \hline 310 \end{array}$ F.	$\begin{array}{r} 157 \\ + 157 \\ \hline 314 \end{array}$ G.	$\begin{array}{r} 157 \\ + 167 \\ \hline 324 \end{array}$ H.
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1 2 3 4	1 2 3 4 5	1 2 3 4 5 6
5 8	6 10	10 12
9 12	15	15 18
16	20	20 24

A.	B.	C.	D.	E.
125	190	200	160	196
170	137	144	250	300

F.	G.	H.	I.	J.
310	100	120	16	150
210	314	324	130	24

$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 4 \quad 0 \quad (40) \\ + 3 \quad 5 \quad (35) \\ \hline 7 \quad 5 \quad (75) \end{array}$	$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 2 \quad 6 \quad (26) \\ + 4 \quad 2 \quad (42) \\ \hline 6 \quad 8 \quad (68) \end{array}$	$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 1 \quad 6 \quad (16) \\ + 2 \quad 6 \quad (26) \\ \hline 3 \quad 12 \quad (42) \end{array}$
$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 4 \quad 2 \quad (42) \\ + 1 \quad 8 \quad (18) \\ \hline 5 \quad 10 \quad (60) \end{array}$	$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 7 \quad 3 \quad (73) \\ + 4 \quad 8 \quad (48) \\ \hline 11 \quad 11 \quad (121) \end{array}$	$\begin{array}{r} \textcircled{10\text{¢}} \quad \textcircled{1\text{¢}} \quad \text{¢} \\ \hline 20 \quad 5 \quad (205) \\ + 20 \quad 5 \quad (205) \\ \hline 40 \quad 10 \quad (410) \end{array}$

$\begin{array}{r} 40 \\ + 40 \\ \hline 80 \end{array}$	$\begin{array}{r} 70 \\ + 70 \\ \hline 140 \end{array}$	$\begin{array}{r} 25 \\ + 25 \\ \hline 50 \end{array}$	$\begin{array}{r} 35 \\ + 35 \\ \hline 70 \end{array}$	$\begin{array}{r} 75 \\ + 75 \\ \hline 150 \end{array}$	$\begin{array}{r} 85 \\ + 85 \\ \hline 170 \end{array}$
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$\begin{array}{r} 90 \\ + 90 \\ \hline 180 \end{array}$	$\begin{array}{r} 125 \\ + 125 \\ \hline 250 \end{array}$	$\begin{array}{r} 150 \\ + 150 \\ \hline 300 \end{array}$	$\begin{array}{r} 155 \\ + 155 \\ \hline 310 \end{array}$	$\begin{array}{r} 156 \\ + 156 \\ \hline 312 \end{array}$	$\begin{array}{r} 166 \\ + 156 \\ \hline 322 \end{array}$
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$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$	$\begin{array}{r} 115 \\ + 115 \\ \hline 230 \end{array}$	$\begin{array}{r} 125 \\ + 115 \\ \hline 240 \end{array}$	$\begin{array}{r} 175 \\ + 115 \\ \hline 290 \end{array}$
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How do you feel?
¿Cómo se siente?

Dear Parent,

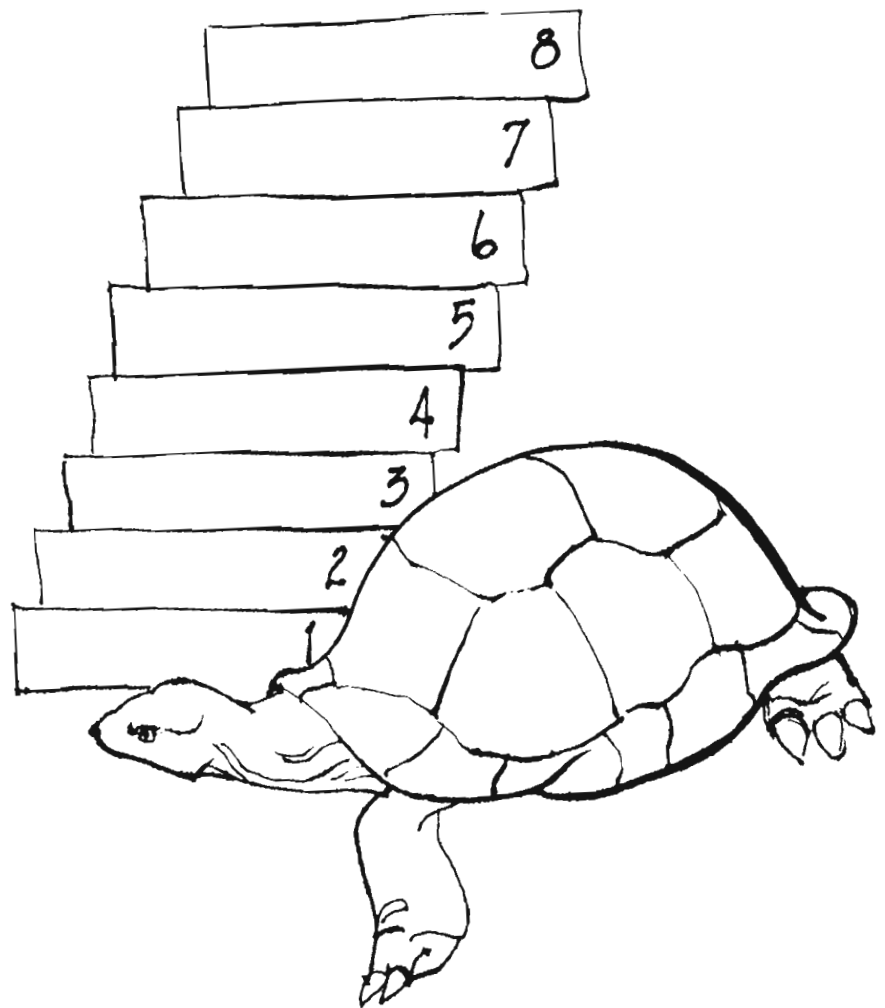
This last check-up exercise really shows us that your child has covered lots of mathematics in this first of the two C-Level Computation books. We hope, above all else, that your child has been filling in the "How Do You Feel?" faces on the tests showing good feelings about mathematics. We remind you, as we remind ourselves, that the child's attitude about math and about himself as a participant in the activities of math are the most important factors in what is learned.

In this last section of the book, your child has been dealing with more addition involving regrouping. But now dimes and pennies have been used to represent the tens and ones, in place of blocks or tensticks and loose beans as before. You can practice this at home too, using real pennies and dimes to really "work" the problems.

The last half of this test looks very difficult, but the problems have been carefully sequenced so that each answer can be checked against the previous problem to see if it's reasonable. And, once again, if there is doubt or hesitation when working at the abstract level, have your child move back to drawing some representations or manipulating with tensticks.

With time to experiment and patience and friendly encouragement from you, your child will continue with high success in mathematics and self-esteem as a competent learner. Thank you once again.

Sincerely,



this
book
belongs
to

este
libro
es de

