Vocabulary check
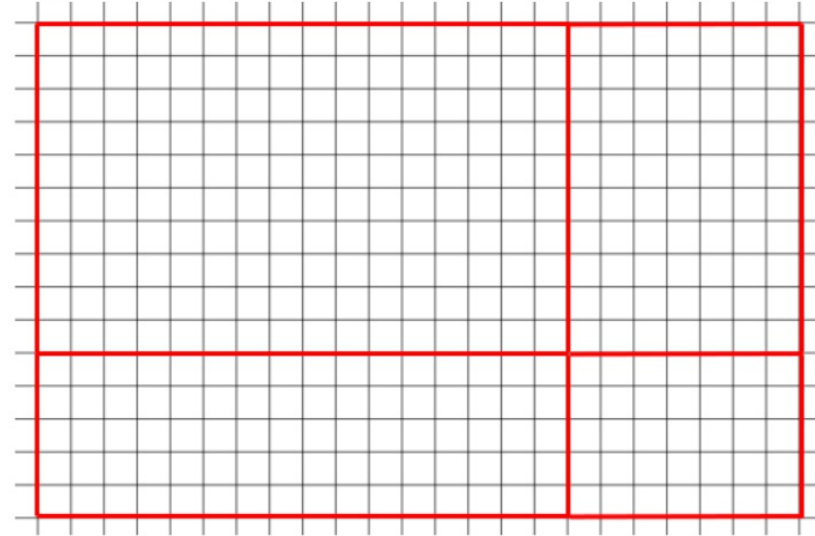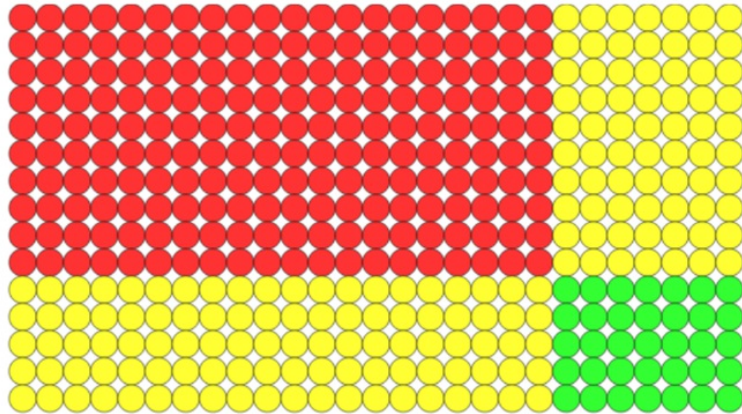
multiply
multiplicand
multiplier
product
place value
grid method
partitioning
associative law
distributive law
commutative law

15   multiplicand

x   2   multiplier

30   product

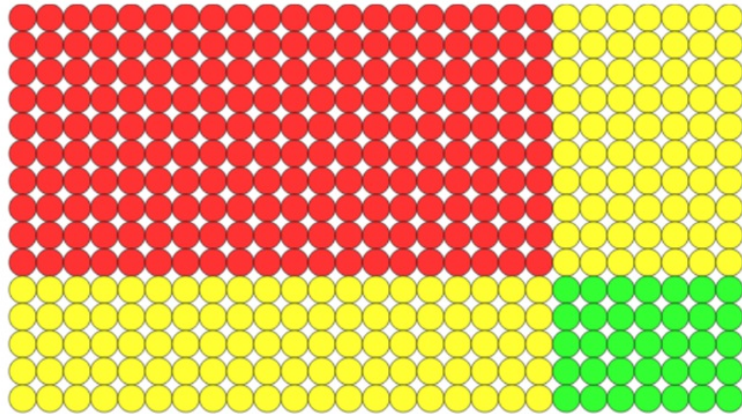| Thousands	Hundreds	Tens	Ones

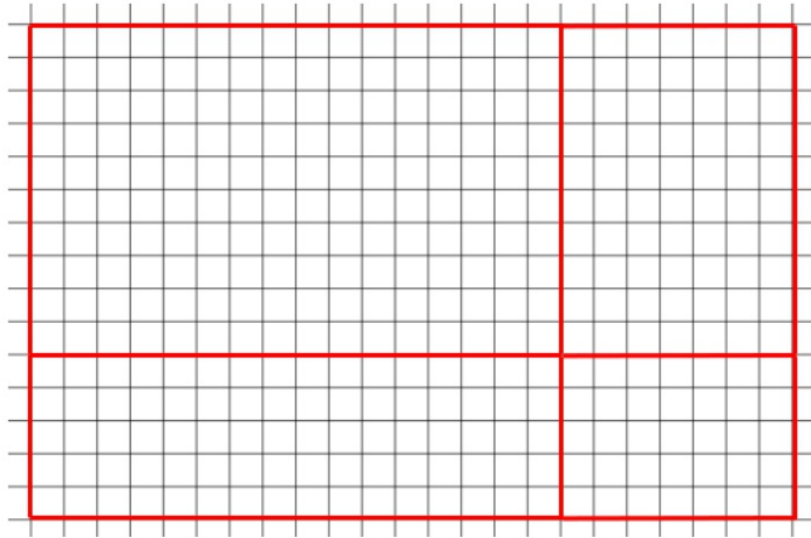Compare these two images.
What is the same? What is different?

How many similarities and differences can you describe?

How can we find the number of:

○ red counters?

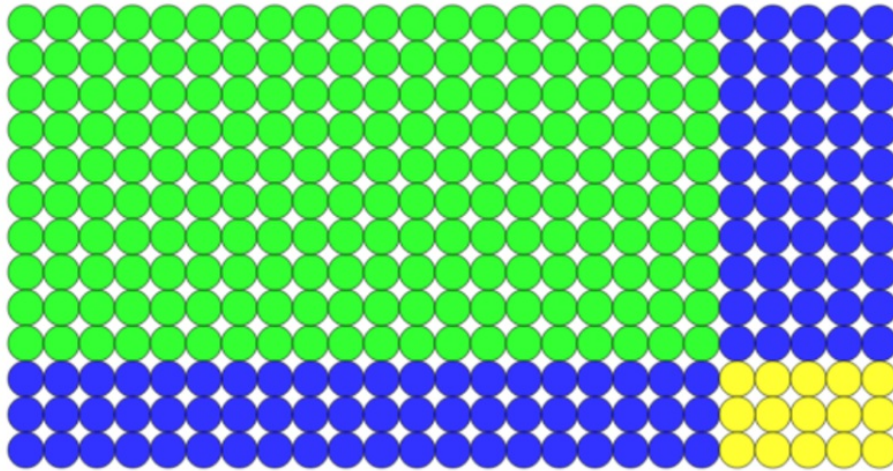○ yellow counters?

○ green counters?

How can we find the number of squares in each small rectangle?
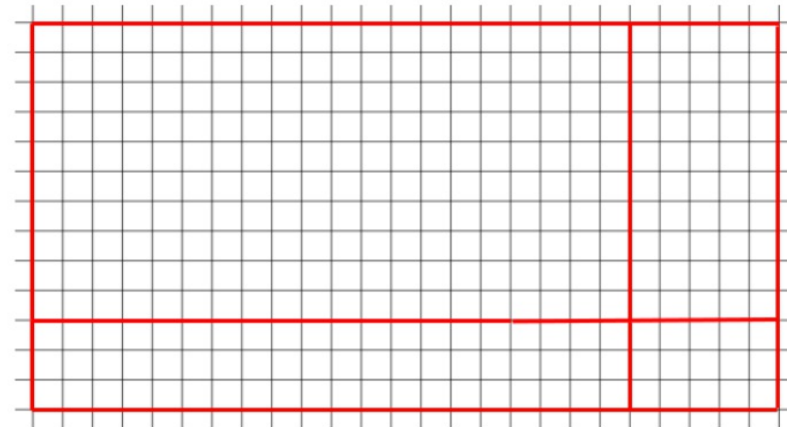
How can we find the total number of squares?

Compare these four representations.
What do you notice?

25 x 13

20 x 10 + 20 x 3 + 10 x 5 + 5 x 3

What is the same? What is different?

How is the "grid method" similar to the grid array?

25 x 13

	20	5
10	20 x 10	10 x 5
3	20 x 3	5 x 3
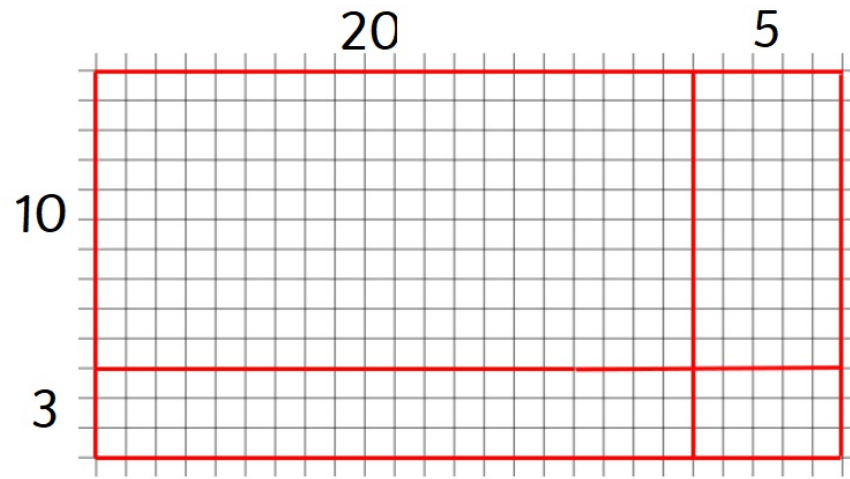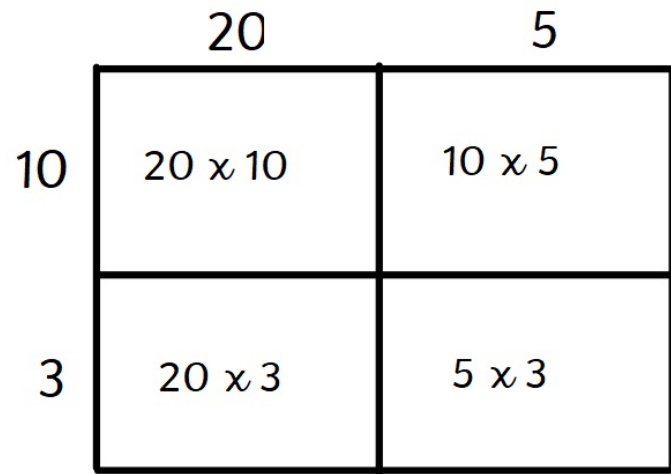
How is it different? Why might this be useful?

I am using the grid method to solve this calculation. Describe what I have done so far and what I still need to do.

$$25 \times 13$$

	20	5
10		
3		

How can I use the grid method to solve this calculation?

125 x 23

Part A

Use the grid method to calculate these:

1.   2363 x 3 =
2.   1874 x 2 =
3.   5067 x 4 =
4.   628 x 13 =
5.   3465 x 38 =
6.   507 x 24 =

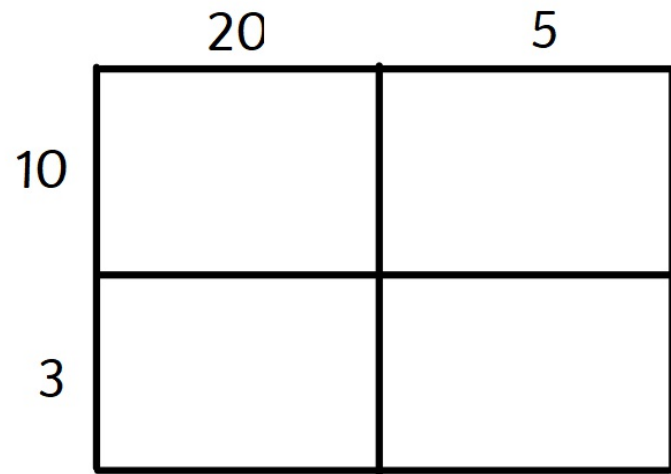| X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Part B

Which of the calculations is the correct answer to 236 x 45 =

Explain why the other calculations are incorrect.

A

X	2	30	6	
40	80	1200	240	1520
5	10	150	35	195

= 1715

B

X	200	30	6	
40	8000	1200	240	9480
5	1000	150	30	1185

= 10665

C

X	200	30	6	
40	8000	1200	240	9440
5	1000	150	30	1180

= 10620