Vocabulary check

multiply
multiplicand
multiplier
product
place value
partitioning
associative law
distributive law
commutative law

15   multiplicand
x 2   multiplier
30   product

132 x 45 =

	100	30	2	
40	4000	1200	80	= 5280
5	500	150	10	= 660

5280 +
660
_____
5940

x x x
132 x
45
_____
660
5280 +
_____
5940

What is the same? What is different?
Which is the most efficient method?

232 x 36 =

192 x 41 =

123 x 65 =

Try It

128 x 45 =

371 x 43 =

262 x 34 =

122 x 86 =

432 x 19 =

382 x 34 =

Use the multiplication grid to help you with your x tables

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

Use it

1) Jon has 236 boxes of apples, each box contains 12 apples. How many does he have altogether?

2) Laura sells 815 cups of orange juice, each cup contains 33ml of drink. How much orange juice does she sell altogether?

3) Pencils come in boxes of 64
A school bought 270 boxes.
Rulers come in packs of 46
A school bought 720 packs.
How many more rulers were ordered than pencils?

Prove it

1)

| 22 × 111 = 2442 |
| 23 × 111 = 2553 |
| 24 × 111 = 2664 |

What do you think the answer to 25 × 111 will be?

What do you notice?

Does this always work?

2) Here are examples of Dexter's maths work.

			9	8	7
×				7	6
		5	5 9	4 2	2
		6	6 9	4 0	9
	1	2 1	8	3 1	1

			3	2	4
×				7	8
			2	5 1 3	9	2
	2	2 1	6 2	8	0
		3	2	7	2

He has made a mistake in each question.

Can you spot it and explain why it's wrong?

Correct each calculation.