Multiply 4-digits by 2-digits

Reasoning and Problem Solving

True or False?

- $5{,}463 \times 18 = 18 \times 5{,}463$

  True

- I can find the answer to $1{,}100 \times 28$ by calculating $1{,}100 \times 30$ and subtracting 2 lots of $1{,}100$

  True

- $702 \times 9 = 701 \times 10$

  False

| 2 | 3 | 4 | 5 | 7 | 8 |

Place the digits in the boxes to make the largest product.

$$
\begin{array}{r}
8\ 4\ 3\ 2 \\
\times \qquad 7\ 5 \\
\hline
6\ 3\ 2\ 0\ 0\ 0 \\
\end{array}
$$

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White Rose Maths

Multiply 3-digits by 2-digits

Reasoning and Problem Solving

R

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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?

The pattern stops at up to 28 × 111 because exchanges need to take place in the addition step.

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?

15,840

Here are examples of Dexter's maths work.

			9	8	7
×				7	6
		5	₅9	₄2	2
		6	₆9	₄0	9
	1	₁2	8	₁3	1

			3	2	4
×				7	8
		₂2	₁1	5	₃9	2
	2	₁2	₂2	6	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.

In his first calculation, Dexter has forgotten to use a zero when multiplying by 7 tens.
It should have been
987×76 = 75,012

In the second calculation, Dexter has not included his final exchanges.
324 × 8 = 2,592
324 × 70 = 22,680
The final answer should have been 25,272

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