Q1 Fran wants to make a **rectangular** enclosure for her rabbit to run around in the garden safely.

She has 20m of wire fence.

The length and width of the rectangle must be in whole metres.

Explain how Fran could find all the possible rectangles she could make using the wire.

See mark scheme for examples

1 mark

Q2 A library starts the day with 2,475 books on its shelves.

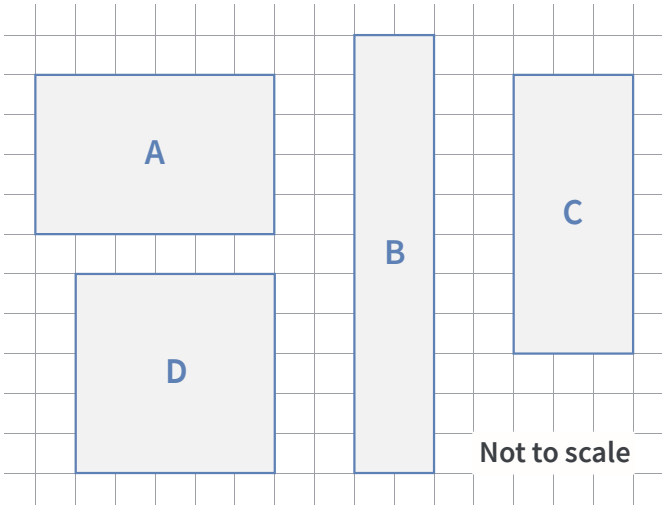
During the day, 890 books are loaned out and 631 books are returned back to the library and put back on the shelves.

How many books are on the library's shelves at the end of the day?

2,216 books

1 mark

Q3 Four pieces of paper are placed on a 1cm square grid.



Complete the table to show the areas of the pieces of paper.

Shape	Area (cm^2)
A	$24cm^2$
B	$22cm^2$
C	$21cm^2$
D	$25cm^2$

2 marks

<table>
<tr><th></th><th>Requirement</th><th>Mark</th><th>Additional guidance</th></tr>
<tr><td>Q1</td><td>Explanation should describe a methodical approach to finding the answer. For example:
– Fran could use a table to record all the different lengths and widths that give a perimeter of 20m.
– Fran could start with a width of 1m and a length of 9m and then increase the width by 1m each time to find all the possibilities.</td><td>1</td><td>This is an open-ended question and has been designed to encourage children to use reasoning to describe how to make sure that they find all possibilities when investigating perimeter.</td></tr>
<tr><td>Q2</td><td>2,216 books</td><td>1</td><td></td></tr>
<tr><td>Q3</td><td><table><tr><th>Shape</th><th>Area (cm^2)</th></tr><tr><td>A</td><td>$24cm^2$</td></tr><tr><td>B</td><td>$22cm^2$</td></tr><tr><td>C</td><td>$21cm^2$</td></tr><tr><td>D</td><td>$25cm^2$</td></tr></table>Award ONE mark for two or three correct areas.
BOTH marks for all correct.</td><td>2</td><td></td></tr>
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