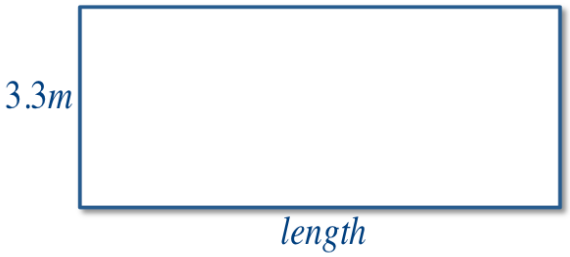
Perimeter - Unknown Dimension

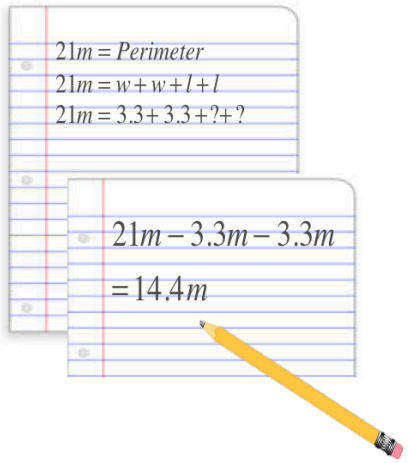
The perimeter of the rectangle is 21 metres. Determine the length of the rectangle.

- Recalling my knowledge of rectangles and perimeter, how would I use the diagram to illustrate the problem?



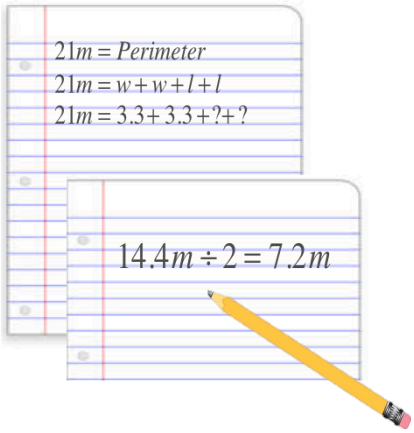
A classmate began solving the problem by performing the following calculation.

- How might I explain their thinking in performing this calculation?

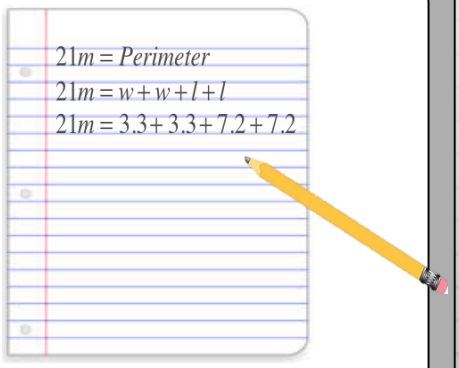


Next, the student performs the following division step as part of their solution path.

- How would I explain their thinking in performing this calculation? What does the quotient represent?

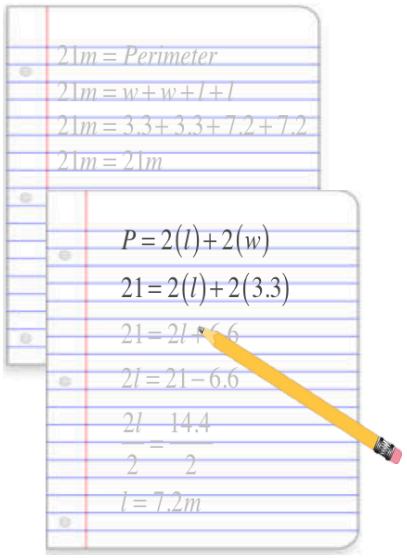


- How could I verify the student has calculated the correct *length* measure?



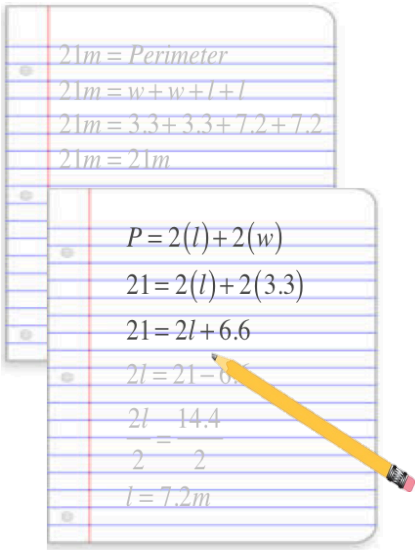
Another classmate solved the same problem using a different approach.

- How would I describe their approach and explain this initial step in their solution path?



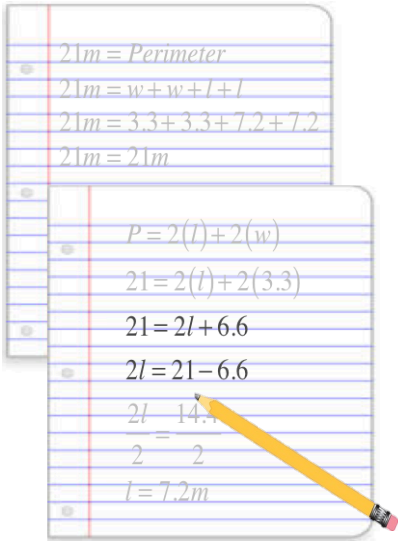
The equation approach involves performing a multiplication step as part of the solution path.

- How would I explain the reason for multiplying?
- How did I avoid multiplying in the previous solution?



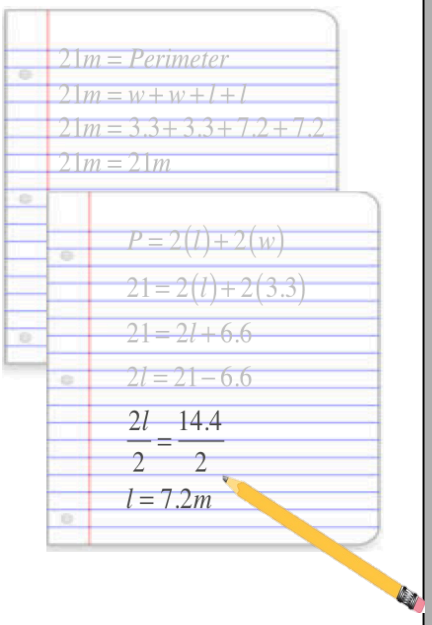
In this part of their solution, the student rewrites the equation and performs a subtraction step.

- How would I explain and demonstrate this step in their solution path?



The student completes their solution by performing a division step.

- Why does the student need to perform this division step to complete their solution path?



Perimeter - Unknown Dimension - Skills Checklist

- ☑ I can describe or illustrate the perimeter of a shape such as a rectangle
- ☑ I can explain and demonstrate how the perimeter distance of a rectangle can be used to determine any missing dimensions
- ☑ I can explain and demonstrate how I use the equation $p=2l+2w$ to determine the perimeter of a rectangle
- ☑ I can explain and demonstrate how the equation $p=2l+2w$ can be used to determine missing dimensions on a rectangle

Perimeter - Unknown Dimension - Worksheet