Question 3

(a) \( L = 3w + 5 \)

\[ L = 3 \times 0.4 + 5 \]

\[ = 3 \times 40 + 5 \]

\[ = 125 \]  \( \checkmark \)

(b) \(-2 \left( (-1)^2 - 4 \times -2 \right) \)

\[ = -2 \left( 1 + 8 \right) \]

\[ = -2 \times 9 \]

\[ = -18, \quad \text{Good} \]

(c) \(-3n - 4 \)

\( \quad \checkmark \)

(d) (i) \( a^2 - 2ba + ab + 2b^2 \)

\[ a^2 - 2ab + ab + 2b^2 \]

\[ = a^2 - ab + 2b^2 \]  \( \checkmark \)

(ii) \( \text{MINUS} \)

\[ \quad \checkmark \]

(e) (i) \( 95p \times \text{bananas} \)

\[ c = 95n \]  \( \checkmark \)

(ii) Total cost is \( c = 95n + 7 \) in pence.

In pounds total cost is \( \frac{95n + 7}{100} \)

\[ \quad \checkmark \]

So \( c = \frac{95n + 7}{100} \), where \( T \) is the total cost in £.
Total score: 11/15

Well done! You have shown a good understanding of the algebra in Unit 5 and you will find these skills useful later in the course. I've two suggestions which I hope will help for your next TMA:

- Do have a quick look back over similar activities and their solutions in the unit. This may help you to spot important details such as the meaning of coefficient in part (d).
- You have made good progress in setting out your solutions clearly. Remember to include a concluding sentence to answer the question asked. For example in (a) your answer should end 'So the length of material is ...' rather than just a number.

Our next online tutorial is on Thursday 25th at 7pm, but if there is anything on this assignment or the course that you would like to discuss before then, please let me know.

Best wishes,

your tutor.