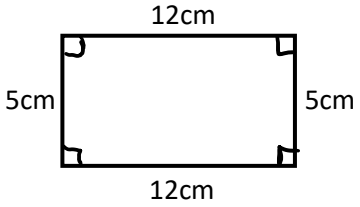
Areas of trapezia

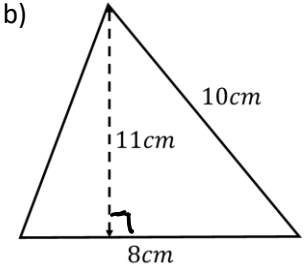
1. Factual recall

Find the areas of these shapes:

a)



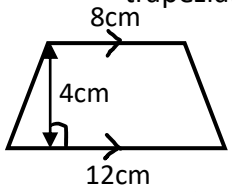
b)



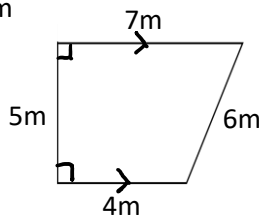
2. Carry out a routine procedure

Find the area of the following trapezia:

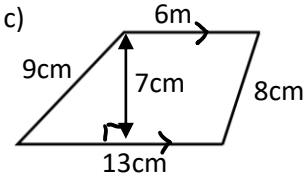
a)



b)



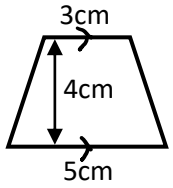
c)



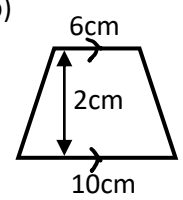
3. Classify some mathematical object

Which of the following trapezia have the same area?

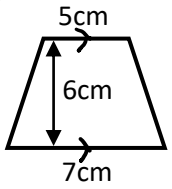
a)



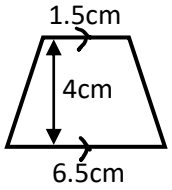
b)



c)

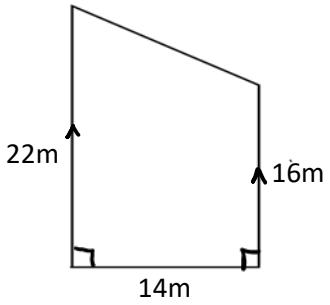


d)



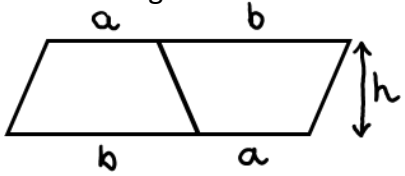
4. Interpret a situation or answer

A grass lawn has the following shape, a box of grass feed spreads over an area of $40m^2$. At a cost of £4.99 per box, how much will it cost to feed the lawn.



5. Prove, show, justify

Two identical trapeziums are arranged as follows.

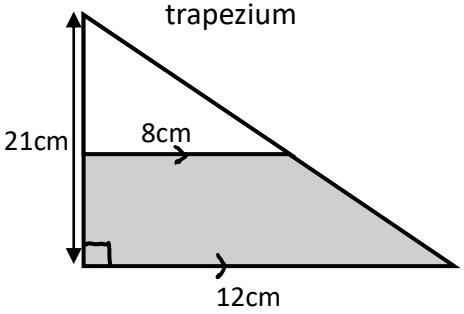


Using the above diagram, show that:

$A_T = \frac{1}{2}(a+b)h$

6. Extend a concept

Find the area of the shaded trapezium

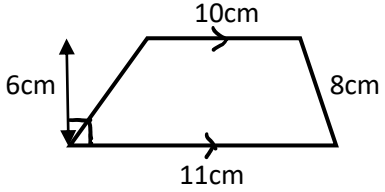


7. Construct an instance

Create a trapezium with an area of $35cm^2$

8. Criticise a fallacy

A student found the area of the following trapezium, find and amend any mistakes made.



$A = \frac{1}{2}(10+11)\times 8$

$= 4 \times 21$

$= 84cm^2$