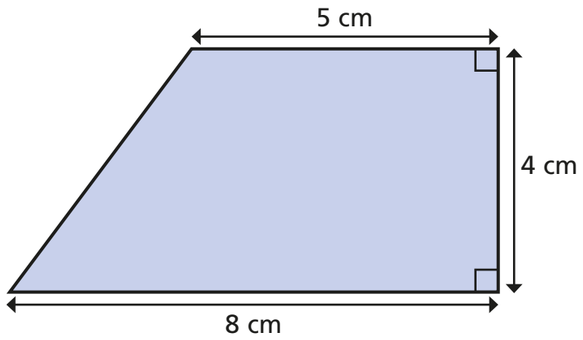
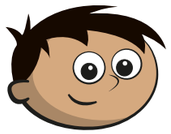
Calculate the area of a trapezium

1 Amir and Rosie are working out the area of this trapezium.

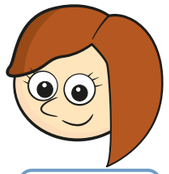




I will divide the shape into a rectangle and triangle, and work out the area of each one.

Amir

I will just use the formula for the area of a trapezium.



Rosie

a) Use Amir's method to find the area of the trapezium.

_____ cm^2

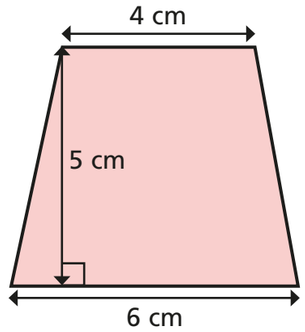
b) Use Rosie's method to find the area of the trapezium.

_____ cm^2

Whose method do you prefer? _____

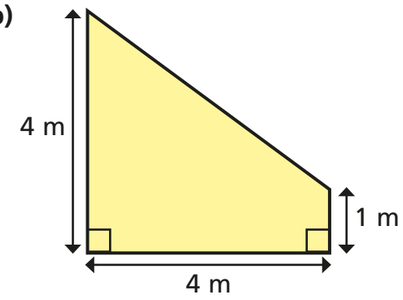
2 Find the area of each trapezium.

a)



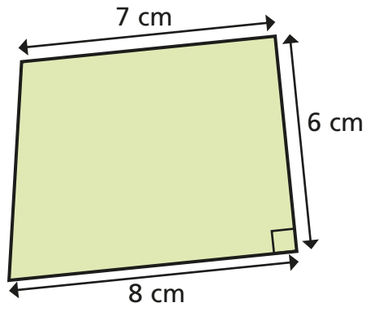
_____ cm^2

b)



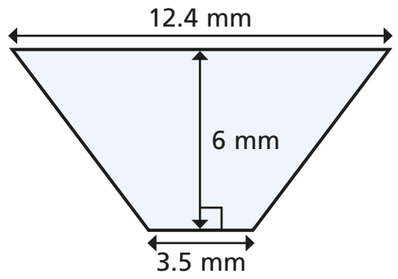
_____ m^2

c)



_____ cm^2

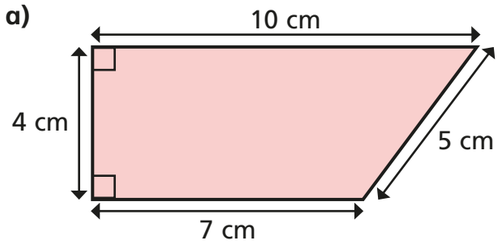
d)



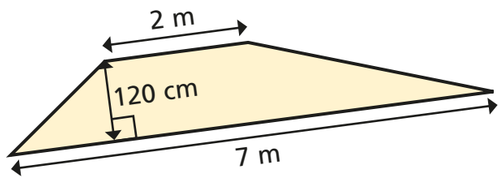
_____ mm^2

3 Work out the area of each trapezium.

a)

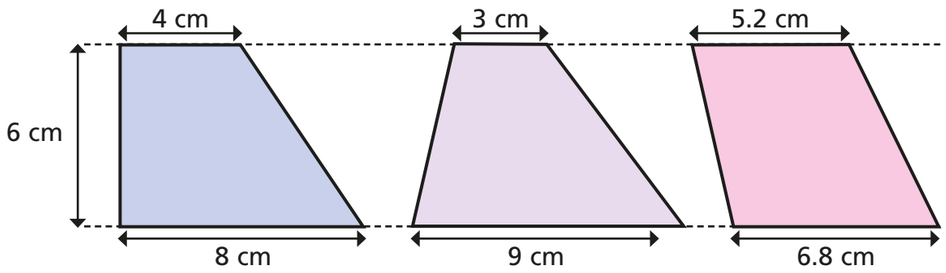


b)



c) Discuss with a partner what mistakes could be made when working out the areas in parts a) and b).

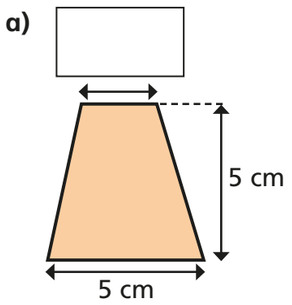
4 Explain why these trapeziums all have the same area.



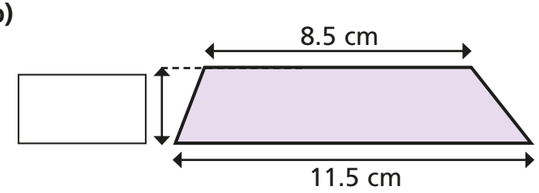
5 The area of each trapezium is 20 cm^2

Find and label the missing lengths.

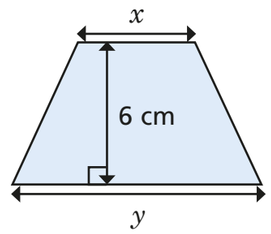
a)



b)



6 The area of the trapezium is 24 cm^2



Write three possible pairs of values of x and y.

$x =$ ☐ cm $y =$ ☐ cm

$x =$ ☐ cm $y =$ ☐ cm

$x =$ ☐ cm $y =$ ☐ cm

7 Prove the statement.

> The formula for a trapezium is equal to the area of a parallelogram when the lengths of a and b are equal.