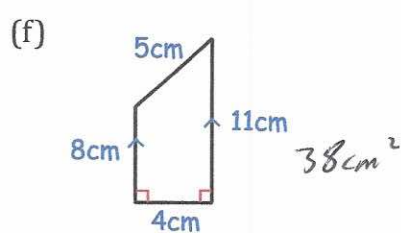
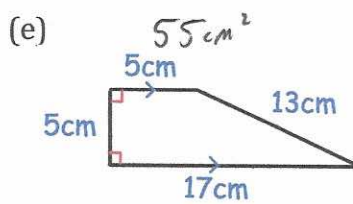
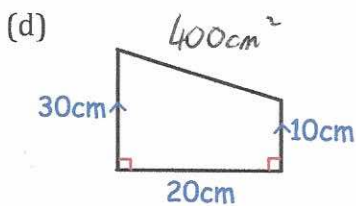
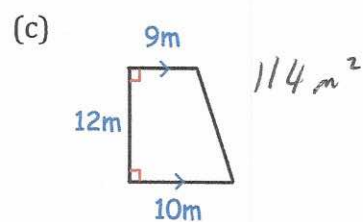
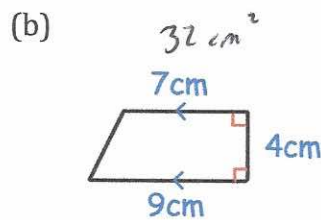
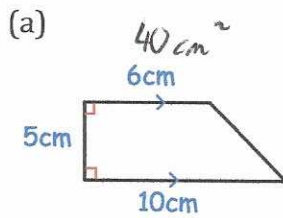
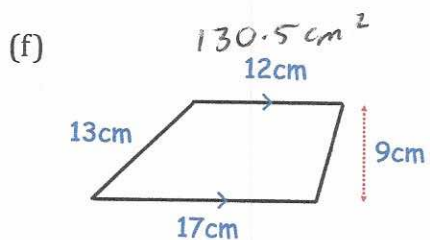
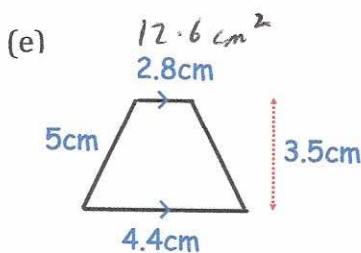
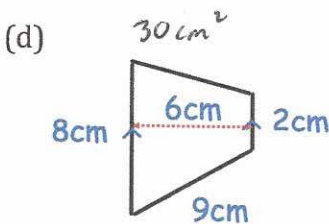
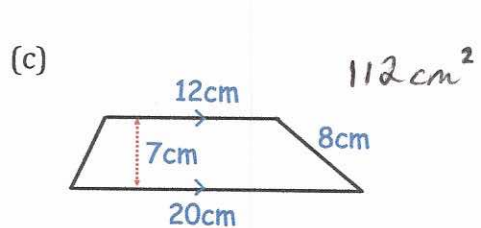
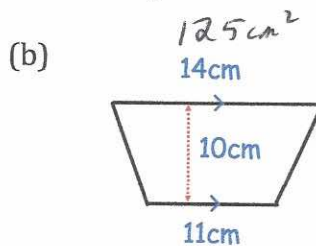
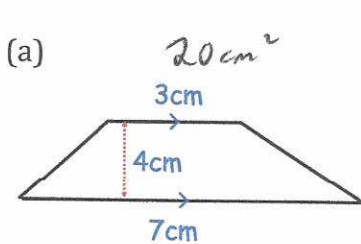


Workout

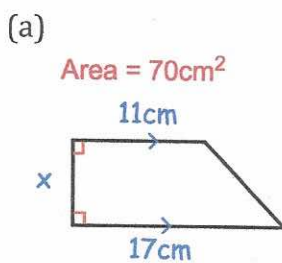
Question 1: Find the area of each trapezium.



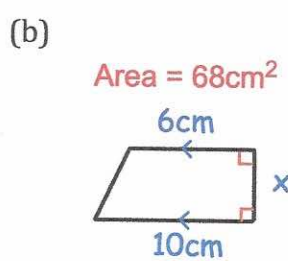
Question 2: Find the area of each trapezium.



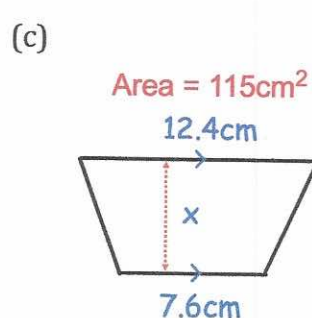
Question 3: Find x for each trapezium.



$x = 5\text{cm}$



$x = 8.5\text{cm}$



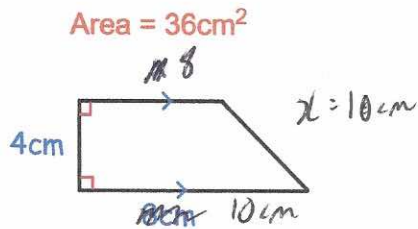
$x = 11.5\text{cm}$

Area of a Trapezium

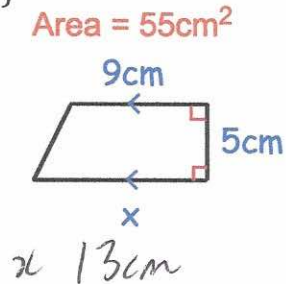
Video 48 on Corbettmaths

Question 4: Find x for each trapezium.

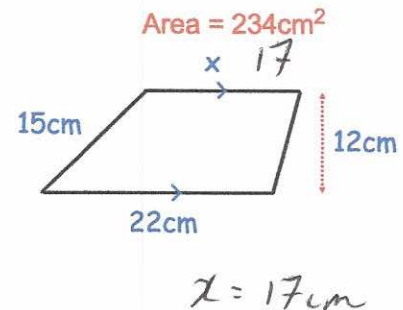
(a)



(b)



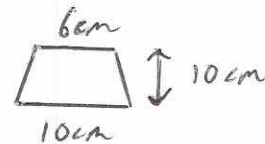
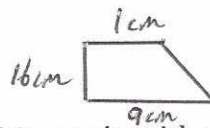
(c)



Apply

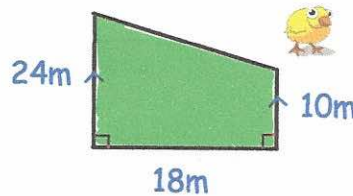
Question 1: Sketch five different trapezia with an area of 80cm^2

There are many possible, here are two examples



Question 2: Mr Taylor keeps chickens in the field shown.
Each chicken needs 3m^2 .

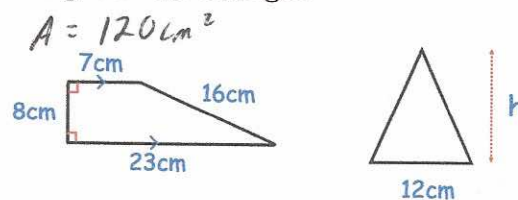
What is the maximum number of chickens he can keep in the field?



Area : 306m^2

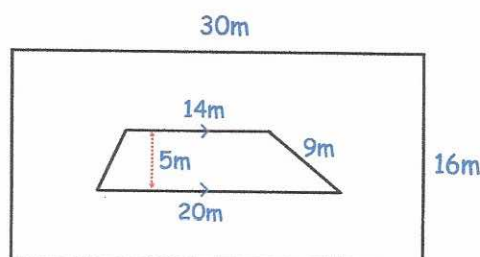
102 chickens

Question 3: The trapezium and the triangle have the same area.
Calculate the height of the triangle.



$h = 20\text{cm}$

Question 4: Shown is a rectangular garden.
There is a flowerbed in the shape of a trapezium.
What percentage of the garden does the flowerbed cover?



garden : 480m^2

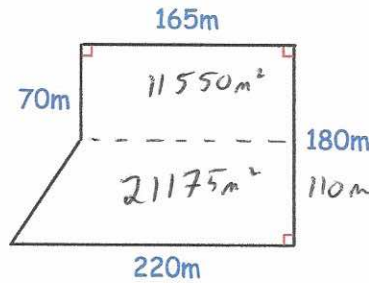
flowerbed : 85m^2

17.7%

Area of a Trapezium

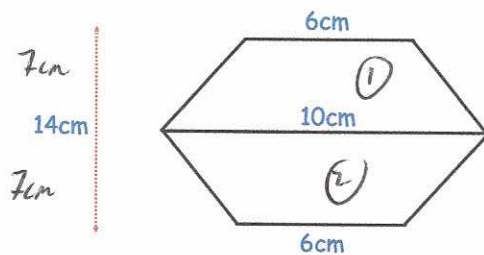
Video 48 on Corbettmaths

Question 5: Farmer Richards owns this field.
The crop he plants earns him £7 for each square metre
How much money does he earn in total?



$32725m^2$
 $\pounds 229075$

Question 6: A badge is made by joining two congruent trapezia.
Find the area of the badge.

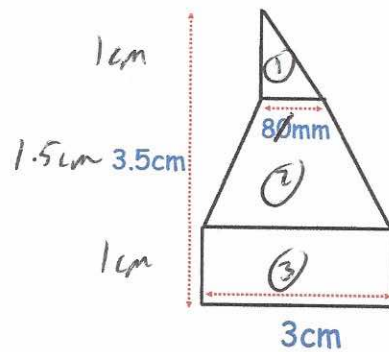


(1) $56cm^2$
(2) $56cm^2$

 $112cm^2$

Question 7: A shape has been made from joining a rectangle, trapezium and triangle.
The height of the shape is 3.5cm.
The ratio of the height of the rectangle to the height of the trapezium to the height of the triangle is 2:3:2.
Calculate the area of the shape.

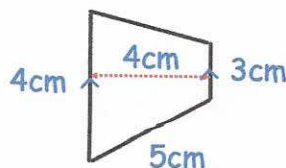
$2+3+2=7$



(1) $0.4cm^2$
(2) $2.85cm^2$
(3) $3cm^2$

 $6.25cm^2$

Question 8: The trapezium below is enlarged by scale factor 3.
(a) Work out the area of the enlarged trapezium.
(b) How many times larger is the area of the enlarged triangle than the trapezium below?



(a) $126cm^2$
(b) 9