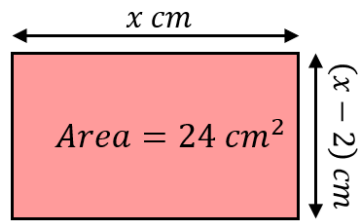


## Solving Quadratic Equations Problems

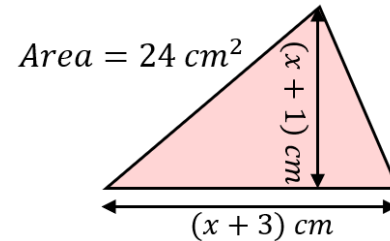
**(a)**



(i) Show that  $x^2 - 2x - 24 = 0$

(ii) Hence find the length and width of the rectangle.

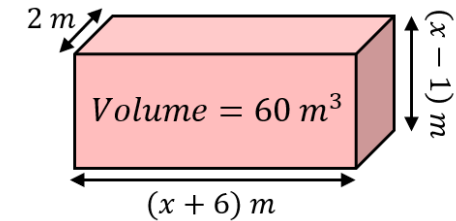
**(b)**



(i) Show that  $x^2 + 4x - 45 = 0$

(ii) Hence find the width and height of the triangle.

**(c)**

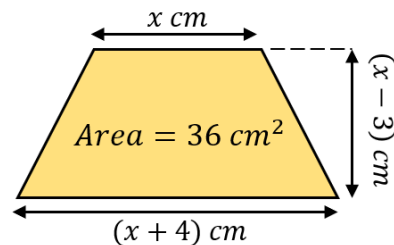


(i) Show that  $x^2 + 5x - 36 = 0$

(ii) Hence find the dimensions of the cuboid.

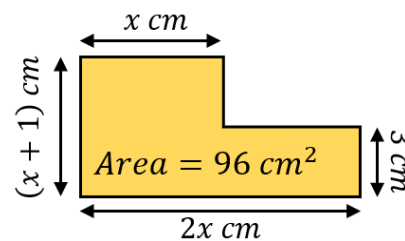
**(d)**

Find the value of  $x$  and hence the dimensions of the trapezium. Show clear algebraic working.



**(e)**

Find the value of  $x$  and hence the dimensions of the compound shape. Show clear algebraic working.



**(f)**

Find the value of  $x$  and hence the dimensions of the cuboid. Show clear algebraic working.

