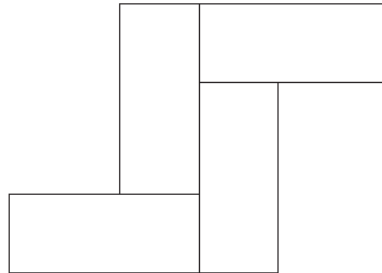


1 Here is a rectangle.



The length of the rectangle is 7 cm longer than the width of the rectangle.

4 of these rectangles are used to make this 8-sided shape.



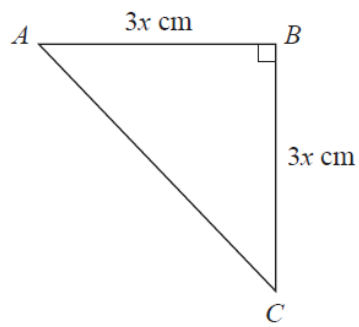
The perimeter of the 8-sided shape is 70 cm.

Work out the area of the 8-sided shape.

..... cm<sup>2</sup>

**(Total for Question is 5 marks)**

- 2  $ABC$  is an isosceles right-angled triangle.



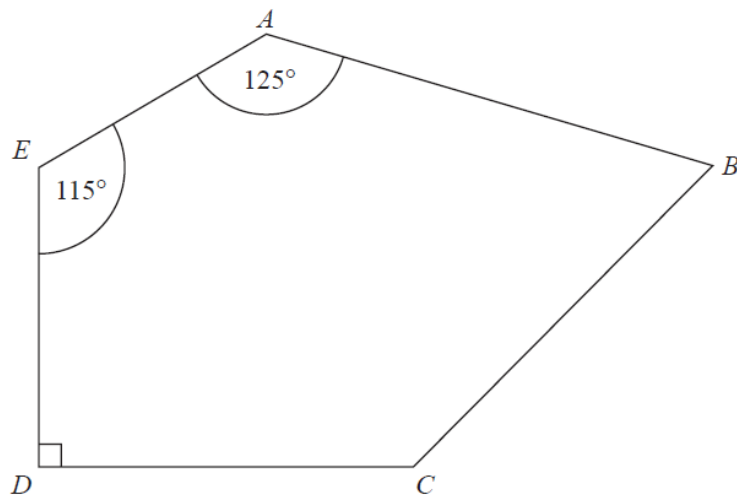
The area of the triangle is  $162 \text{ cm}^2$

Work out the value of  $x$ .

$$x = \dots\dots\dots$$

(Total for Question is 3 marks)

3  $ABCDE$  is a pentagon.



Angle  $BCD = 2 \times$  angle  $ABC$

Work out the size of angle  $BCD$ .  
You must show all your working.

- 4 Ben is  $n$  years old.  
Chloe is twice as old as Ben.  
Dan is five years younger than Ben.

The total of Ben's age, Chloe's age and Dan's age is  $T$  years.

- (a) Find a formula for  $T$  in terms of  $n$ .

.....  
(3)

- (b) In the table below, put a tick ( $\checkmark$ ) in the box next to the identity.

$3h + 2 = 14$	<input type="checkbox"/>
$3a + 4b - 2c$	<input type="checkbox"/>
$A = \pi r^2$	<input type="checkbox"/>
$5m - 3m = 2m$	<input type="checkbox"/>
$x + 7 \leq 12$	<input type="checkbox"/>

(1)

**(Total for Question is 4 marks)**