

Forming Linear Equations Homework

Q7.

Dan has some marbles.
Ellie has twice as many marbles as Dan.
Frank has 15 marbles.

Dan, Ellie and Frank have a total of 63 marbles.

How many marbles does Dan have?

Q10.

Hilary, Imogen and Jeeha are playing a game with cards.

Imogen has 3 cards more than Hilary.
Jeeha has twice as many cards as Imogen.

They have a total of 53 cards.

Work out how many cards Hilary has.

.....

(Total for question = 4 marks)

Q12.

Julie and Liam write down the same number.

Julie multiplies the number by 5 and then adds 4 to the result.
She writes down her answer.

Liam subtracts the number from 10
He writes down his answer.

Julie's answer is two thirds of Liam's answer.

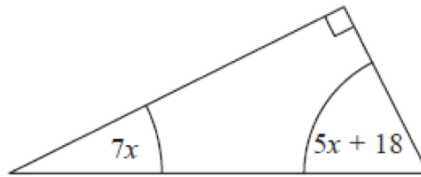
Work out the number that Julie and Liam started with.
You must show your working.

.....

(Total for question = 5 marks)

Q13.

The diagram shows a right-angled triangle.



All the angles are in degrees.

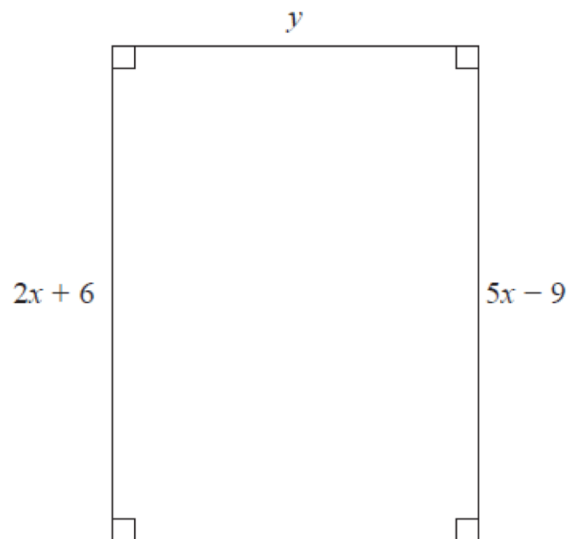
Work out the size of the smallest angle of the triangle.

..... °

(Total for question is 3 marks)

Q14.

Here is a rectangle.



All measurements are in centimetres.

The area of the rectangle is 48 cm^2 .

Show that $y = 3$

(Total for question = 4 marks)

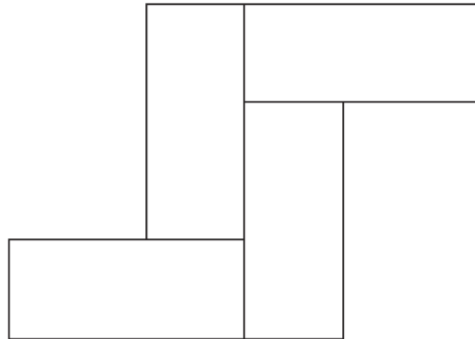
Q17.

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.

..... cm²

(Total for question = 5 marks)