

9 (a) Write the time 8 30 pm using the 24-hour clock.

.....  
(1)

Ella started watching television at 10 50 am.

Ella watched

- a comedy programme lasting 45 minutes
- a sports programme lasting 1 hour 10 minutes
- a history programme

There were no breaks and no advertisements between the programmes.  
Ella finished watching television at 2 20 pm.

(b) How long did the history programme last?  
Give your answer in minutes.

..... minutes  
(3)

**(Total for Question 9 is 4 marks)**



10 Hermann changed £500 into euros.  
The exchange rate was  $\text{£}1 = 1.18$  euros.

(a) Work out how much money, in euros, Hermann received.

..... euros  
(2)

Anita changed \$350 into pounds (£)  
The exchange rate was  $\text{£}1 = \$1.40$

(b) Work out how much money, in pounds (£), Anita received.

£.....  
(2)

(Total for Question 10 is 4 marks)



11 Asif has 200 beads.

Asif gives  $\frac{1}{4}$  of the 200 beads to Bernadette.

Asif gives  $\frac{2}{5}$  of the 200 beads to Claudio.

Asif gives 43 beads to Derek.

What fraction of the 200 beads does Asif have left?

.....  
(Total for Question 11 is 4 marks)



12 30 children were asked whether they have a cat ( $C$ ) or a dog ( $D$ )

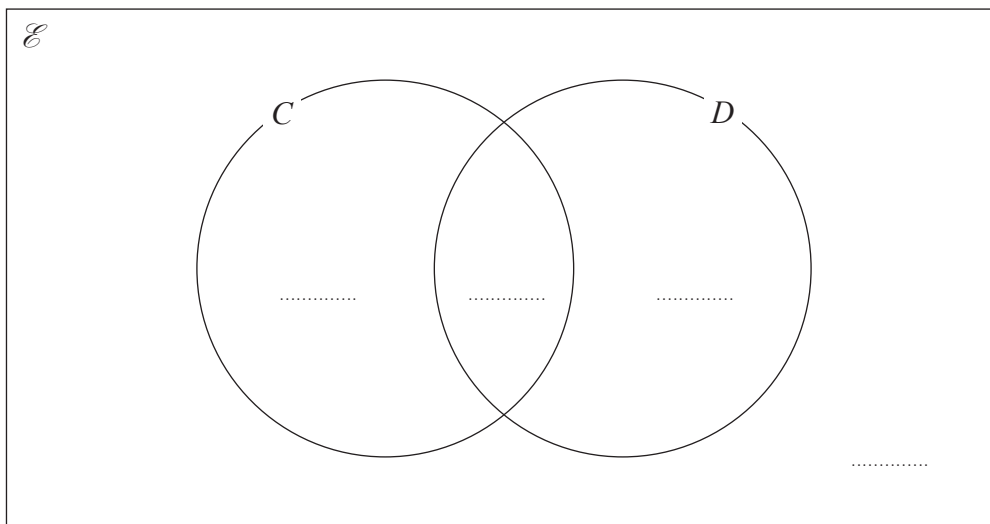
Of the 30 children

5 have both a cat and a dog

13 have a dog

11 have **only** a cat

(a) Complete the Venn diagram.



(3)

One of the children is picked at random.

(b) Find the probability that this child

(i) has a dog,

.....  
(1)

(ii) does not have a dog and does not have a cat.

.....  
(1)

(Total for Question 12 is 5 marks)



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13 The diagram shows the plan of a floor.

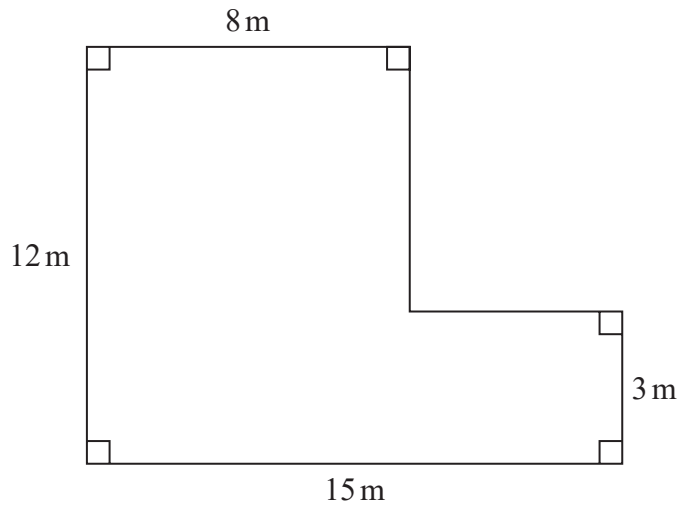


Diagram NOT accurately drawn

Indira is going to paint the floor.  
She needs to buy enough tins of paint to cover the floor with one coat of paint.

Each tin of paint covers an area of  $7 \text{ m}^2$   
Each tin of paint costs £23.90

Indira buys the least possible number of tins of paint.

Work out the total cost of the tins of paint that Indira buys.  
Show your working clearly.

£.....

(Total for Question 13 is 5 marks)



P 7 2 4 4 2 A 0 1 5 2 8

14 (a) Expand  $x(10 - x)$

.....  
(1)

(b) Factorise  $6y + 27$

.....  
(1)

(c) Make  $m$  the subject of the formula  $h = \frac{m}{2} + 4$

.....  
(2)

(d) Solve  $7g + 3 = 2g - 5$   
Show clear algebraic working.

$g =$  .....  
(3)

(Total for Question 14 is 7 marks)



15 Show that  $4\frac{2}{3} \div 1\frac{5}{6} = 2\frac{6}{11}$

(Total for Question 15 is 3 marks)

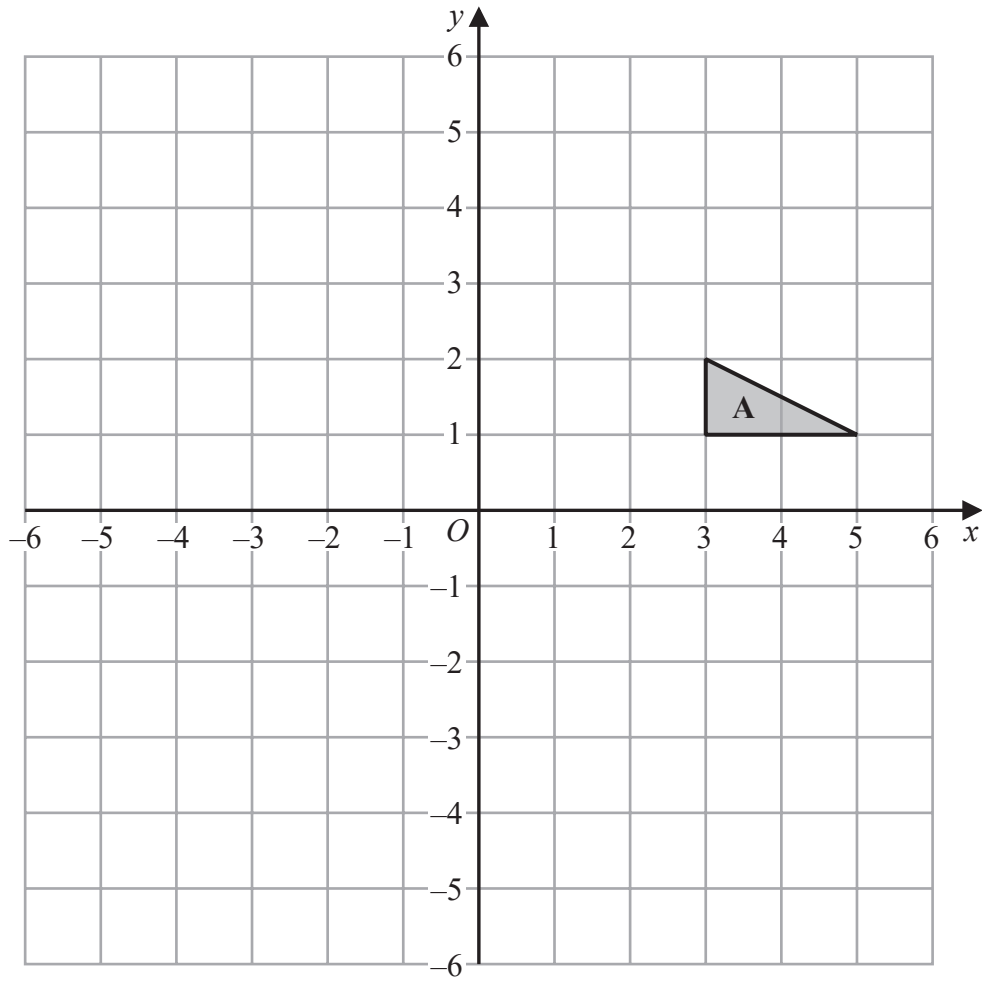
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P 7 2 4 4 2 A 0 1 7 2 8



(a) On the grid, rotate triangle **A**  $180^\circ$  about  $(1, -1)$   
 Label the new triangle **B** (2)

(b) On the grid, translate triangle **A** by the vector  $\begin{pmatrix} -7 \\ 3 \end{pmatrix}$   
 Label the new triangle **C** (1)

(Total for Question 16 is 3 marks)

