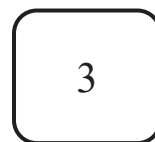
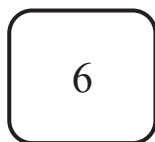
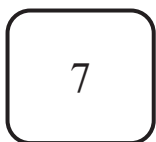
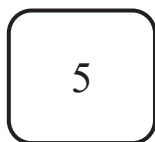


Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

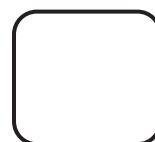
You must write down all the stages in your working.

- 1 Here are four cards.
Each card has a number on it.



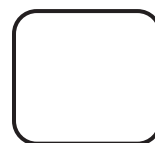
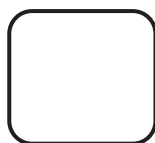
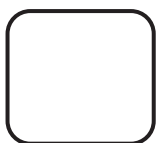
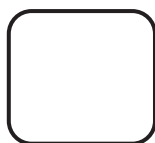
These four cards are arranged to make the number 5763

- (a) Arrange the four cards to make the smallest possible number.



(1)

- (b) Arrange the four cards to make the largest possible **even** number.



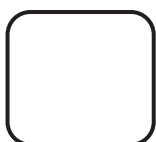
(1)

- (c) Arrange two of the cards to make a prime number.



(1)

- (d) Arrange two of the cards to make a multiple of 8

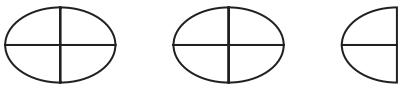
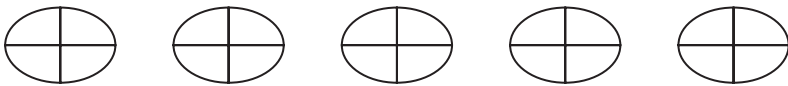
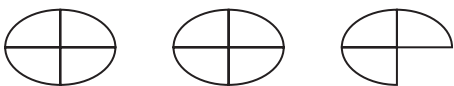
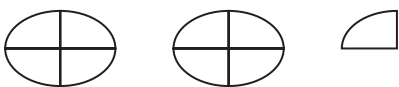
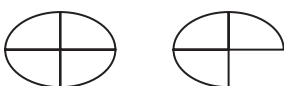


(1)

(Total for Question 1 is 4 marks)



- 2 The pictogram shows information about the total weight of potatoes grown last year in each of five countries.

Bangladesh	
USA	
Germany	
Poland	
France	
The Netherlands	

Key:  represents 4 million tonnes of potatoes

The pictogram shows one country where the total weight of potatoes grown last year was 20 million tonnes.

- (a) Which country?

.....
(1)

Last year, the weight of potatoes grown in The Netherlands was 6 million tonnes.

- (b) Show this information on the pictogram.

(1)

- (c) Work out the total weight of potatoes grown in Germany **and** in France last year.

..... million tonnes
(2)

(Total for Question 2 is 4 marks)

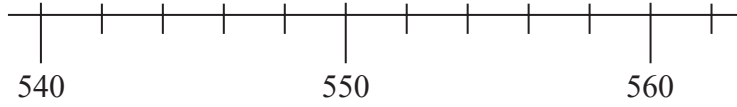


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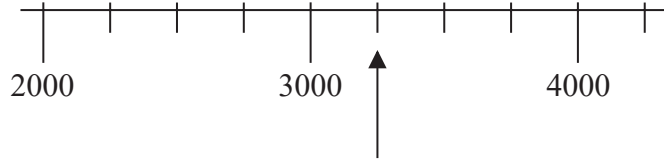
3 Here is a number scale.



(a) On the scale, mark with an arrow (\uparrow) the number 554

(1)

Here is a different number scale.



(b) Write down the number shown marked by the arrow.

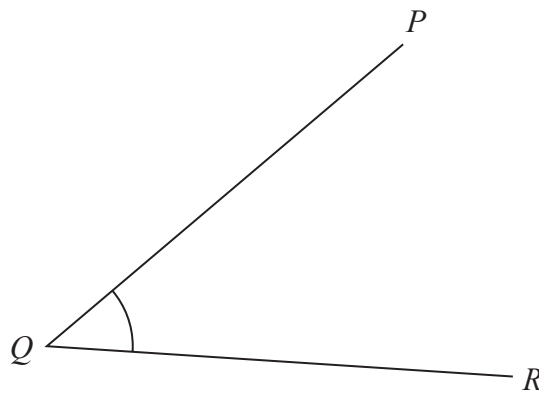
.....
(1)

(Total for Question 3 is 2 marks)

4 (a) In the space below, draw a line of length 6.5 cm

(1)

The diagram shows the straight lines QP and QR



(b) Measure the size of angle PQR

.....
(1)

(Total for Question 4 is 2 marks)



5 The table gives information about the costs of sending parcels of different weights.

Weight (w kg)	Cost of sending a parcel
$0 < w \leq 1$	£6.00
$1 < w \leq 2$	£9.02
$2 < w \leq 5$	£15.85
$5 < w \leq 10$	£21.90

Peony has one parcel of weight 1.3 kg and another parcel of weight 8 kg to send to two different places.

(a) Work out the total cost of sending these two parcels.

£.....
(2)

Gryffyn sends 3 parcels each to a different place.

One of the parcels has a weight of 1.5 kg and another of the parcels has a weight of 2.8 kg

The total cost of sending the 3 parcels is £33.89

(b) Work out the greatest possible weight of the third parcel.

..... kg
(3)

(Total for Question 5 is 5 marks)



- 6 (a) Write 5 15 pm using the 24-hour clock.

.....
(1)

Roberta goes out for a walk.

She leaves home at 16 35

She arrives back home at 20 15 on the same day.

- (b) Work out for how much time Roberta is out for her walk.

..... hours minutes
(2)

(Total for Question 6 is 3 marks)

- 7 (a) Simplify $c \times c \times c \times c \times c$

.....
(1)

- (b) Solve $5 + x = 12$

$x =$
(1)

- (c) Solve $\frac{y}{6} = 3$

$y =$
(1)

- (d) Expand $5(2 + 3h)$

.....
(1)

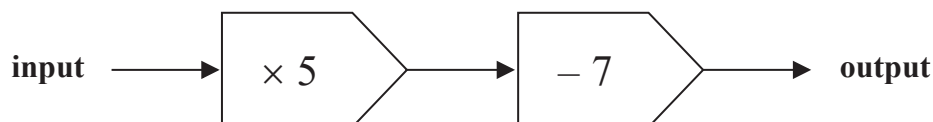
- (e) Factorise $g^2 + 7g$

.....
(1)

(Total for Question 7 is 5 marks)



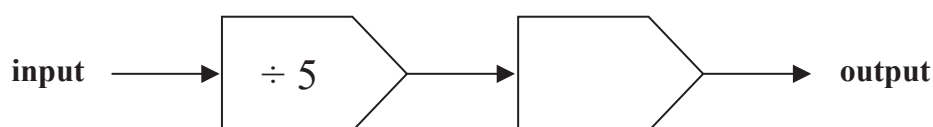
8 Here is a number machine.



(a) Work out the output when the input is 9

.....
(1)

Here is a different number machine.



When the input is 30 the output is 18

(b) Find a suitable way to complete the number machine.

(1)

The following rule is used to work out the total cost, in euros, of hiring a cement mixer.

Total cost = 8 euros per day plus 5 euros

James hires a cement mixer for 3 days.

(c) Work out the cost to James of hiring the cement mixer.

..... euros
(1)

The cost to Sophia of hiring a cement mixer is 61 euros.

(d) For how many days does Sophia hire the cement mixer?

..... days
(2)

(Total for Question 8 is 5 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

9 There are 120 cyclists in a cycling club.
 There are 67 professional cyclists and the rest are amateur cyclists.
 Each of these cyclists was asked to name their favourite type of bike.

The two-way table shows some information about their answers.

	Road bike	Mountain bike	Hybrid bike	Total
Professional	26			67
Amateur		32		
Total	39	54		120

(a) Complete the table.

(3)

(b) Work out the percentage of the cyclists who answered Mountain bike.

..... %
 (2)

Jacob is going to draw a pie chart for the age groups of the 120 cyclists.
 There are 41 people in the 'over 60' age group.

(c) Work out the size of the angle for the sector representing the 'over 60' age group.

..... °
 (2)

(Total for Question 9 is 7 marks)

