

DO NOT WRITE IN THIS AREA

Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 The table gives information about six plays written by William Shakespeare.

Play	Number of words	Year written
The Taming of the Shrew	21 055	1592
Henry V	26 119	1599
Hamlet	30 557	1602
Macbeth	17 121	1606
Julius Caesar	19 703	1599
King John	20 772	1596

(a) Which of these six plays has the greatest number of words?

..... (1)

Two of these six plays were written in the same year.

(b) Write down the name of each of these plays.

..... and (1)

The play Othello has 9329 more words in it than the play Macbeth.

(c) Work out the number of words in the play Othello.

..... (1)

(d) Write the number 21 055 in words.

..... (1)

(Total for Question 1 is 4 marks)



P 7 2 4 3 5 A 0 3 2 8

- 2 Luca has 5 kg of chopped tomatoes.
He also has some empty tins.

When full, each tin holds 350 g of chopped tomatoes.

Luca fills as many tins as possible with the chopped tomatoes.

Work out the weight of the chopped tomatoes remaining after Luca has filled as many tins as possible.

Give the units of your answer.

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.....
(Total for Question 2 is 4 marks)



3 A sequence of patterns is made from squares.

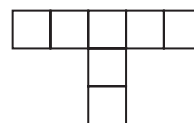
Pattern number 1



Pattern number 2



Pattern number 3



(a) In the space below, draw Pattern number 4

Pattern number 4

(1)

(b) Complete the table.

Pattern number	1	2	3	4	5
Number of squares	1	4	7		

(1)

(c) Work out the number of squares in Pattern number 8

.....
(1)

Angus says

“there are 42 squares in Pattern number 15”

Angus is incorrect.

(d) Explain why.

.....
.....
.....
(1)

(Total for Question 3 is 4 marks)



4 (a) Write 0.8 as a percentage.

..... %
(1)

(b) Write down the value of the 3 in the number 4.7634

.....
(1)

(c) Write these decimals in order of size.
Start with the smallest decimal.

0.204 0.24 0.04 0.2 0.042

.....
(1)

(d) Write 25.78621 correct to 2 decimal places.

.....
(1)

(e) Find the square root of 1296

.....
(1)

(Total for Question 4 is 5 marks)

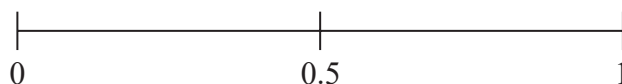


- 5 Adam has 8 packets of noodles.
Here is the flavour of noodles in each packet.

Hot and Spicy	Curry	Vegetarian	Hot and Spicy
Curry	Hot and Spicy	Curry	Hot and Spicy

Adam takes at random a packet of noodles.

- (a) (i) On the probability scale, mark with a cross (×) the probability that Adam takes a packet of Hot and Spicy noodles.



(1)

- (ii) Circle the word that best describes the likelihood that Adam takes a packet of Vegetarian noodles.

impossible unlikely even likely certain

(1)

Belinda asks 20 people to name the type of rice that they each like the best.

Here are her results.

arborio	jasmine	basmati	jasmine	basmati
basmati	arborio	wild	jasmine	jasmine
jasmine	jasmine	arborio	basmati	basmati
wild	basmati	jasmine	wild	arborio

- (b) Complete the frequency table for Belinda's results.

Type of rice	Tally	Frequency
arborio		
basmati		
jasmine		
wild		

(2)

(Total for Question 5 is 4 marks)



6 Sandeep sells 600 tickets for an event.
He receives a total of \$7200 from selling the tickets.

$\frac{1}{4}$ of the tickets sold are child tickets.

The rest of the tickets sold are adult tickets.

The cost of an adult ticket is \$13.60

Work out the cost of a child ticket.

\$

(Total for Question 6 is 4 marks)

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7 (a) Simplify $5p \times 9k$

.....
(1)

(b) Simplify $3e + 2f + 8e - 7f$

.....
(2)

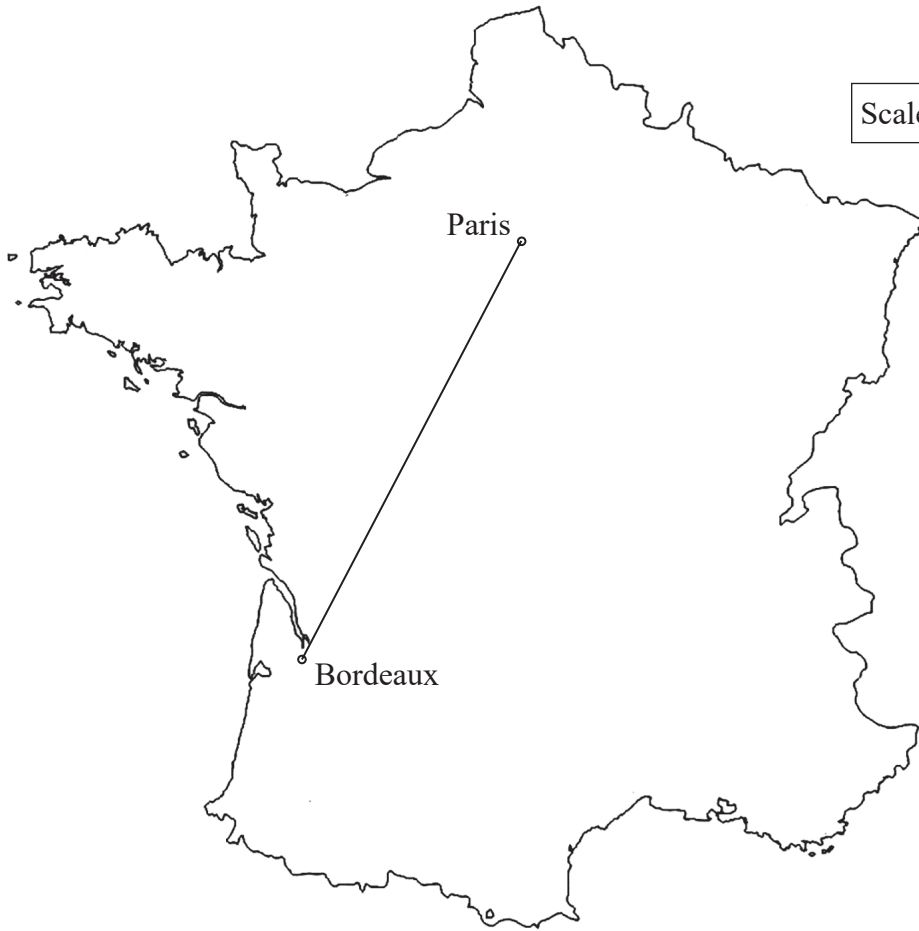
(c) Solve $2d + 7 = 16$

$d =$
(2)

(Total for Question 7 is 5 marks)



8 Here is a scale drawing showing the positions of Paris and Bordeaux.



Scale: 1 cm represents 80 km

Alain drives from Paris to Bordeaux.
The distance that he drives is 590 km.

This distance is greater than the actual straight line distance between Paris and Bordeaux.

How much greater?
Show your working clearly.

..... km

(Total for Question 8 is 4 marks)

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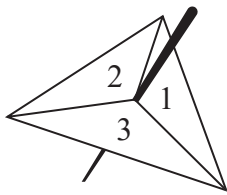


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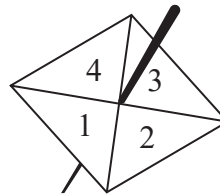
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9 Avner has two fair spinners.



Spinner A



Spinner B

Spinner **A** can land on 1, 2 or 3
 Spinner **B** can land on 1, 2, 3 or 4

Avner **multiplies** the number on which spinner **A** lands by the number on which spinner **B** lands to find his score.

- (a) Complete the table to show all possible scores.
 Seven of the scores have been completed for you.

		Spinner A		
		1	2	3
Spinner B	1	1	2	3
	2	2	4	
	3	3		
	4	4		

(2)

Avner spins spinner **A** once and spinner **B** once.

- (b) Find the probability that his score is an odd number.

.....
 (1)

(Total for Question 9 is 3 marks)



P 7 2 4 3 5 A 0 1 1 2 8