Denstone College English Entrance Exam: Guidance for Candidates

The paper will last **45 minutes** and assesses your **writing** skills.

There will be a **choice of two questions**: one asks you to write a piece of fiction and the other a piece of non-fiction.

You may interpret the tasks in any way you see fit. The non-fiction task will name a particular text type for you to adopt, such as a speech, magazine article or letter, for example.

You will be marked according to the following three criteria:

- How well you communicate clearly, effectively and imaginatively, selecting and adapting tone, style and register for different forms, purposes and audiences;
- How well you organise information and ideas, using structural and grammatical features to support coherence and cohesion of texts;
- How well you use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.

You should try to display **confidence** and **imagination** in your writing. See it as a chance to **express yourself** and show your command of language.

First Form Practice Paper 2019

English

Only answer one of the Questions

Name:…………………………………

School :………………………………

45 Minute Paper
(Total: 40 Marks)

WRITING

Answer ONE question.

You should spend 45 minutes on the question of your choice.

Write your answer in the space provided.

EITHER *IMAGINATIVE WRITING*

*1 Write about a time when you, or someone you know, visited a new place for the first time.

Your response could be real or imagined.

In your response you should consider:
• where the place was
• what you did when you visited it
• interesting things about the place
• the other people involved

as well as any other ideas you might have.

*You will receive marks for spelling, punctuation and grammar. You should make sure you:
• *check the spelling of words you have used*
• *try to use varied punctuation such as question marks, exclamation marks, semicolons, commas*
• *try to use different types of sentence such as questions, commands, exclamations, short sentences.*

(Total for Question 1 = 40 marks)

OR *NON-FICTION WRITING*

*2 Write a short talk to give to students in your class about the importance of being helpful.

In your speech you could include:
• what being helpful means
• positive benefits of being helpful
• any downsides to being helpful
• examples of being helpful

as well as any other ideas you might have.

*You will receive marks for spelling, punctuation and grammar. You should make sure you:
• *check the spelling of words you have used*
• *try to use varied punctuation such as question marks, exclamation marks, semicolons, commas*
• *try to use different types of sentence such as questions, commands, exclamations, short sentences.*

(Total for Question 1 = 40 marks)

Denstone College English Markscheme: WRITING

Year			Content and Organisation. I can:		Technical accuracy. I can:		
1st Form	2nd Form	3rd Form +	Style and Impact	Organisation	Sentences and Punctuation	Vocabulary	Spelling
		9	-Communicate a range of complex ideas in a compelling and sophisticated way. -Sustain crafting a wide range of stylistic or rhetorical choices to enhance impact in subtle ways, assuredly matched to audience and purpose.	-Organise and paragraph complex ideas in a seamless and fluent way. -Use inventive and techniques to structure writing and create effects.	-Construct a wide range of complex, accurate sentence structures to craft a distinctive voice. -Use the full range of punctuation with consistent accuracy to aid emphasis.	Choose precise, extensive and genre-specific vocabulary to suit my purpose and often for striking impact.	Spell consistently accurately, including irregular and polysyllabic vocabulary. Errors are rare.
	9	8	-Communicate a range of convincing and complex ideas. -Craft a number of stylistic or rhetorical choices to enhance impact, effectively matched to audience and purpose.	-Organise detailed connected ideas with increasing sophistication. -Integrate discourse markers and structural choices for impact.	-Construct a wide range of accurate sentence structures to achieve complex effects. -Use the full range of punctuation with consistent accuracy.		
9	8	7	-Communicate a range of convincing and imaginative ideas. Effective use of tone and register. - Craft stylistic choices to create effects and enhance impact.	-Organise connected ideas. -Integrate discourse markers and structural choices to create effects.	-Construct a wide range of sentence structures for deliberate effects. -Use a wide range of punctuation with substantial accuracy.	Choose precise, extensive and genre-specific vocabulary to suit my purpose.	Spell with a high level of accuracy, including irregular and polysyllabic vocabulary.
8	7	6	-Effectively communicate developed ideas in a way that would hold the reader's interest. -Consistently match stylistic choices to the form, audience and purpose.	-Organise my writing in a controlled way to create meaning. -Paragraphing/structure/linking devices are used to create meaning.	-Construct an increasing variety of sentence structures, often with effects. -Use a range of punctuation for clarity and effect.	Choose genre-specific and ambitious vocabulary, mostly precisely, to suit my purpose.	Spell generally accurately, including a range of irregular and polysyllabic vocabulary.
7	6	5	-Clearly communicate with imaginative detail. -Selection of material or stylistic devices to suit purpose, with appropriate tone and register	-Organise my writing so that it is well-structured. -Consistently use appropriate paragraphs. -Use a range of linking techniques appropriately.	-Construct a variety of sentence structures, sometimes for effect. -Use a range of punctuation mostly with success and sometimes for effect.	Choose increasingly sophisticated vocabulary to suit my purpose.	Spell generally accurately, including a range of polysyllabic vocabulary.
6	5	4	-Clearly communicate ideas, developed with some imaginative detail. -Some selection of material or stylistic devices to suit purpose	-Organise ideas clearly, likely with a clear beginning and ending. -Consistently use paragraphs, but not always appropriately.	-Construct a variety of sentence structures using more complex connectives (e.g. subordinating conjunctions) -Use a range of punctuation mostly with success.	Show a wide range of vocabulary with some complexity in my work, with some effective choices.	Spell most common vocabulary accurately with some polysyllabic vocabulary secured.
			PARAGRAPHING WILL BE PRESENT AT THIS GRADE AND ABOVE		**SENTENCE SEPARATION WILL BE SECURE AT THIS GRADE AND ABOVE.**		
5	4	3	-Clearly communicate relevant ideas developed with some detail. -Show some awareness of form and purpose.	-Put ideas in an order that makes sense. -Use some paragraphs. -Use a range of simple discourse markers.	-Construct a variety of sentence structures using a range of simple connectives. -Show some control of a wider range of punctuation, with control of full stops and commas.	Show a range of common vocabulary in my work with some effective choices	Spell most common vocabulary accurately.
4	3		-Communicate a number of simple relevant ideas. - Show some awareness of the form and purpose of the writing, even if not all the time.	-Put ideas in an order that mostly makes sense. -Show awareness of paragraphing -Use a number of simple discourse markers	-Attempt a variety of sentence types with simple connectives. -Usually show accurate end of sentence punctuation, with some control of the comma.	Show some range of vocabulary in my work.	Usually spell common vocabulary correctly, including words with more than one syllable.
3			-Produce some simple relevant ideas which someone else could understand. -Use the main features of the type of writing (e.g. letter, article, story)	-Loosely organise ideas. -Make some links between sentences and ideas.	-Use mostly simple sentences with simple connecting words. -Display some understanding of full stops, commas and capital letters.	Begin to make varied and deliberate word choices in my writing.	Get some of my spellings accurate in my writing.

1st Form Mathematics Entrance Paper Information

The assessment is broadly in line with the Key Stage 2 National Curriculum programme of study, up to the end of Year 5, with the following additional topics:

- Volume of a cuboid
- Simplifying simple algebraic expressions
- Simple probability
- Simple averages

The majority of marks are awarded for numeracy. There are a number of marks on functional skills, using maths on real life problems; here marks are awarded for the pupil's ability to show their thinking skills in their written work. It is extremely important that pupils realise are encouraged to set their work out in a clear logical manner. Marks can be awarded for correct working, even when the final answer is incorrect.

The pupils will sit a 45 minute paper non-calculator paper. They should have the following equipment: pen, pencil, ruler, rubber, compass & protractor.

1ˢᵗ Form   Entrance Exam

DENSTONE COLLEGE

LIGNVM CRVCIS ARBOR SCIENTIAE

Mathematics
Practice Paper 1
60 Marks - 45 Minutes
No Calculator

Name:…………………………………..

School :……………………………….

- You must **show sufficient working** to make your methods clear.
- You should have a pen, pencil, ruler, rubber, compass & protractor
- Write in Black ink and draw in Pencil, use a ruler to draw straight lines.

Result: / 60 = …………..%

Question 1

Workout the value of the following

a.)   25 x 10

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

b.)   21.3 x 100

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

c.)   239.6 ÷ 10

...........................(1)
(Total 3 Marks)

Question 2

Calculate

a.) 24 x 36

.............................(2)

b.) 37.24 + 19.63

...........................(2)
(Total 4 Marks)

Question 3

Complete the following table

+	2.5	1/2	-1
7			
-5			
3.6			

<div align="right">(Total 6 Marks)</div>

Question 4

Here is a list of 6 numbers:

42   13   38   27   9   2

a.) Which two numbers in the list are prime numbers?

<div align="right">…………………..(1)</div>

b.) Which number in the list is a cube number?

<div align="right">…………………..(1)</div>

c.) Which number is the list is divisible by 7?

<div align="right">…………………..(1)</div>

d.) Which number in the list is a square number?

<div align="right">…………………..(1)</div>
<div align="right">(Total 4 Marks)</div>

Question 5

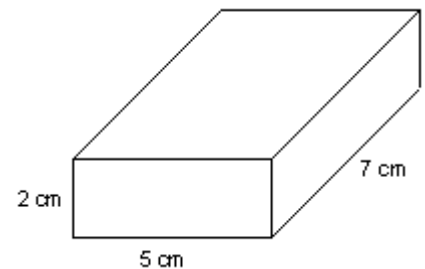a.) **Find 35% of £250**

…………………..(3)

b.) **Complete the following table by working out the equivalent fraction or percentage. You must write fractions in their simplest form.**

Percentage	Fraction
25%	
	¾
	3/20
85%	

(4)
(Total 7 marks)

Question 6

a.) **Find the area of the base.**

…………………..(2)

b.) **Find the Surface Area of the cuboid:**

…………………………………………….cm² (2)

(Total 4 marks)

Question 7

Find the missing angles

a)
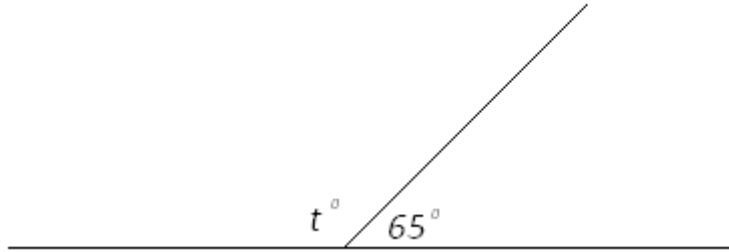
$t=$.............................(2)

b)

$p=$.............................(2)
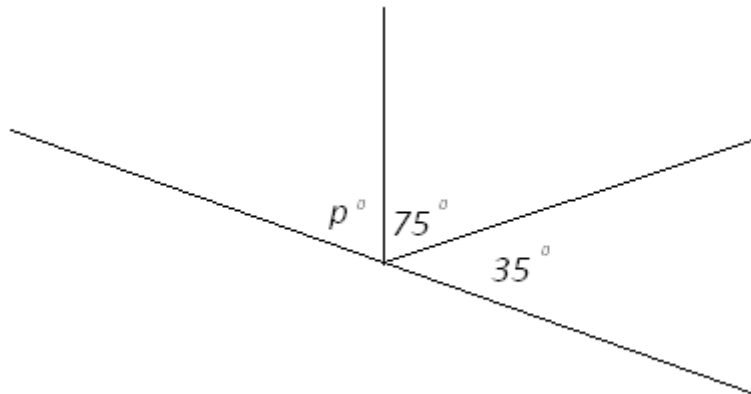
(Total 4 Marks)

Question 8
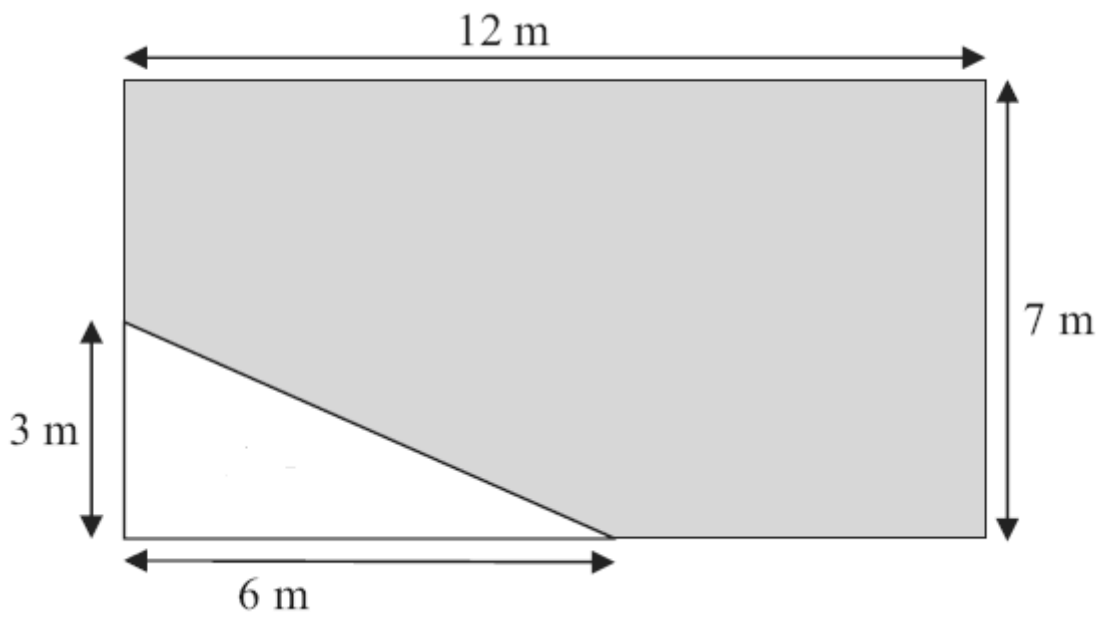
Find the area of the shaded shape:

....m²
(Total 4 Marks)

Question 9

This is part of a list of TV programmes for 1 evening:


```
18 00  Tikkabilla
18 30  Teletubbies
19 00  Lunar Jim
19 10  Kerwhizz
19 35  Lazy Town
20 00  ChuckleVision
20 15  Arthur
20 30  Richard Hammond's Blast Lab
```

a.) Which TV programme lasts for 10 minutes?

……………………….(1)

b.) Brian turned on his TV set at 1740. How many minutes did he have to wait for the start of Arthur?

……………………….(2)

c.) Richard Hammond's Blast Lab lasts for 45 minutes. At what time did the programme end?

……………………….(2)
(Total 5 marks)

Question 10

The table gives information about the prices and the features of five mobile phones. The ticks (✓) in the table show the features of each phone.

Mobile phone	Price	Feature			
		Camera	MP3	FM Radio	Video
Astra	£24.97	✓			
Crystal	£24.97	✓			✓
Pixar	£39.97	✓	✓	✓	
Spark	£34.23	✓		✓	✓
Tacco	£34.97	✓	✓	✓	✓

(a) Which of the five mobile phones is the most expensive?

....

(1)

(b) Which of the mobile phones have MP3?

....

(1)

(c) Which mobile phone has Video but not FM Radio?

....

(1)

(Total 3 Marks)

Question 11

Here is the price list at Pete's café.

Pete's Café	
Price List	
Cup of Tea	£1.25
Cup of Coffee	£1.75
Can of Cola	95p
Filled roll	£2.25
Sandwiches	£2.95
Sausage roll	£1.75

Susan buys

     two cups of tea,
     a sausage roll and
     a sandwich.

She pays with a £10 note.

(a)   How much change should she get?

£ …………………………………………….(3)

Jodie stops at Pete's café.
She only has £3.60 in her purse.

She wants to buy a drink and something to eat.

(b)   List the 5 possible combinations Jodie can afford to buy.

…………………………….. and ………………………………

…………………………….. and ………………………………

…………………………….. and ………………………………

…………………………….. and ………………………………

(3)

…………………………….. and ………………………………   (Total 6 Marks)

Question 12

Complete this bill:

	Gary's Auto Repairs		

Description	Number	Cost of each item	Total
Spark plug	4	£2.50	£ 10.00
Wiper blade	2	£1.50	£ ....
Light bulb	2	£	£ 5.00
Labour charge 1½ hours at £ 16.00 an hour			£ ....
Total cost			£ ....

(Total 4 marks)

Question 13

The diagram shows some letters on some cards.

A   A   A   A

B   B   B

C   C   C

D
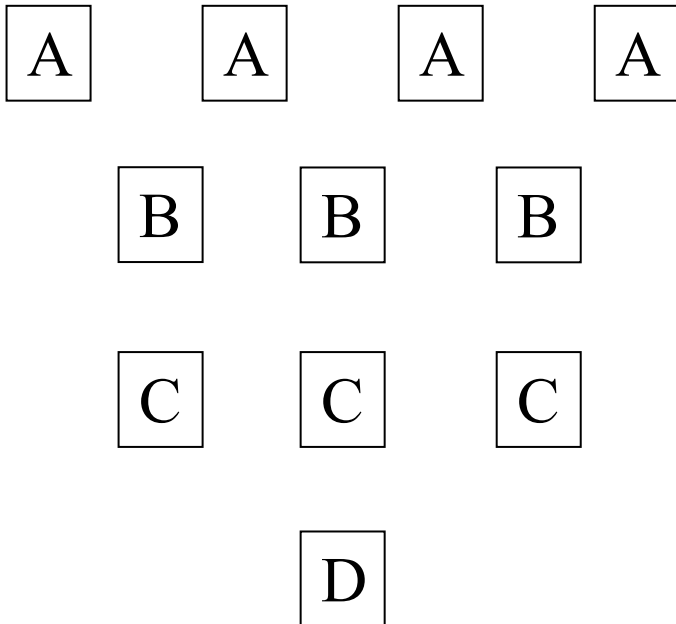
Tamara takes a card at random.

(a)   Which letter is most likely to be on the card?

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

(b)   Which letter is least likely to be on the card?

..............(1)
(Total 2 Marks)

Question 14

Here is a set of data:

                 3,   6,   4,   5,   9,   3

a.) Find the mean for this set of data:

……………………….(2)

b.) Find the range of this set of data:

……………………….(2)

(Total 4 marks)

END   **(60 marks)**

1ˢᵗ Form   Entrance Exam

DENSTONE COLLEGE

LIGNUM CRUCIS ARBOR SCIENTIAE

Mathematics
Practice Paper 1
60 Marks - 45 Minutes
No Calculator

Name:.....Solutions.....

School :.............................

- You must **show sufficient working** to make your methods clear.
- You should have a pen, pencil, ruler, rubber, compass & protractor
- Write in Black ink and draw in Pencil, use a ruler to draw straight lines.

Result: / 60 = ...%

Question 1

Workout the value of the following

a.)   25 x 10

$$250 \quad \text{.........................(1)}$$

b.)   21.3 x 100

$$2130 \quad \text{.........................(1)}$$

c.)   239.6 ÷ 10

$$23.96 \quad \text{.........................(1)}$$

(Total 3 Marks)

Question 2

Calculate

a.) 24 x 36

```
    36
  x 24
  -----
  1 4 4
  7 2 0
  -----
   864
```
①

①

$$864 \quad \text{.........................(2)}$$

b.) 37.24 + 19.63

```
  37.24
  19.63
  ------
  56.87
```
①

①

$$56.87 \quad \text{.........................(2)}$$

(Total 4 Marks)

Question 3

Complete the following table

+	2.5	1/2	-1
7	9.5	7.5	6
-5	-2.5	-4.5	-6
3.6	6.1	4.1	2.6

(Total 6 Marks)

Question 4

Here is a list of 6 numbers:

42   13   38   27   9   2

a.) Which two numbers in the list are prime numbers?

2, 13

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

b.) Which number in the list is a cube number?

27

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

c.) Which number is the list is divisible by 7?

42

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

d.) Which number in the list is a square number?

9

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

(Total 4 Marks)

Question 5

a.) Find 35% of £250

e.g. $\dfrac{250}{10} = 25$ ①

$25 \times 3 = 75$ $25 \div 2 = 12 \cdot 5$ ① $\quad \begin{array}{r} 75 \\ +12 \cdot 5 \\ \hline 87 \cdot 5 \end{array}$

87·5 ....(3)

b.) Complete the following table by working out the equivalent fraction or percentage. You must write fractions in their simplest form.

Percentage	Fraction
25%	1/4
75%	¾
15%	3/20
85%	17/20

(4)
(Total 7 marks)

Question 6

2 cm   5 cm   7 cm
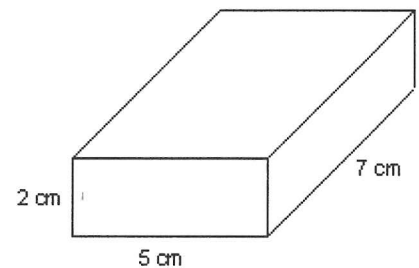
a.) Find the area of the base.

$7 \times 5 = 35 \, cm^2$
    ①   ①

.....................(2)

b.) Find the Surface Area of the cuboid:

$2 \times 5 = 10$
$2 \times 7 = 14$
$5 \times 7 = 35$
$\overline{}$
$\quad 59$

59×2 ①

118 ①

....cm² (2)

(Total 4 marks)

Question 7

Find the missing angles

a)

$t°$ $65°$
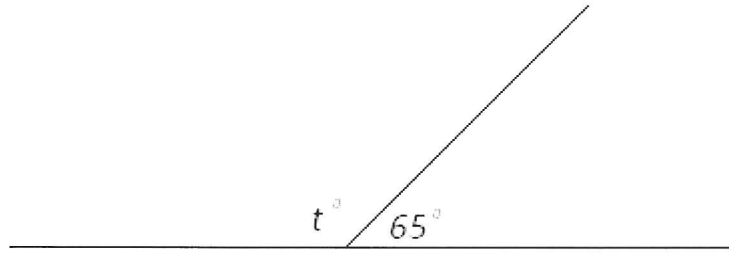
$$\begin{array}{r} 180 \\ -65 \\ \hline 115 \end{array}$$ ①
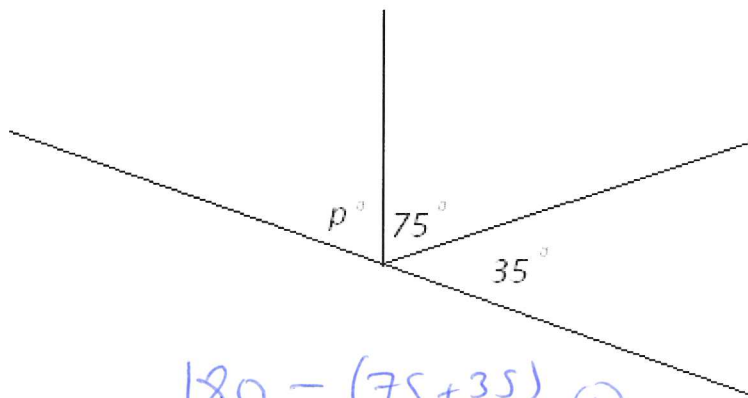
① $115°$

$t=\dots\dots 115°\dots\dots$(2)

b)

$p°$ $75°$ $35°$

$180 - (75+35)$ ①

$180 - 110$

① 70

$p=\dots\dots\dots\dots$(2)

(Total 4 Marks)

Question 8

Find the area of the shaded shape:

12 m

7 m

3 m

6 m
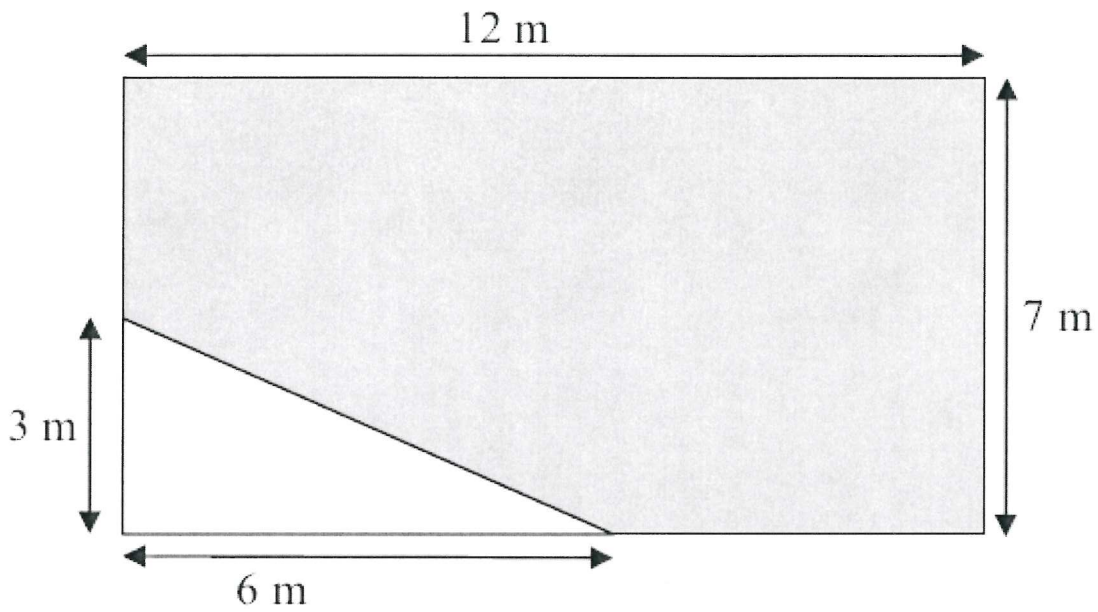
$12 \times 7 \quad = 84$ ①

$\frac{1}{2} \times 6 \times 3 \quad = \underline{\quad 9 \quad}$ ①

75 ① subtracting

75 ①

....m²

(Total 4 Marks)

Question 9

This is part of a list of TV programmes for 1 evening:

18 00 Tikkabilla
18 30 Teletubbies
19 00 Lunar Jim
19 10 Kerwhizz
19 35 Lazy Town
20 00 ChuckleVision
20 15 Arthur
20 30 Richard Hammond's Blast Lab

a.) Which TV programme lasts for 10 minutes?

Lunar Jim ....(1)

b.) Brian turned on his TV set at 1740. How many minutes did he have to wait for the start of Arthur?

17:40 → 18:00 = 20 mins.
18:00 → 20:15 = 2h 15mins. ①

2h 35m ① ....(2)

c.) Richard Hammond's Blast Lab lasts for 45 minutes. At what time did the programme end?

② 9:15 ....(2)

(Total 5 marks)

Question 10

The table gives information about the prices and the features of five mobile phones. The ticks (✓) in the table show the features of each phone.

Mobile phone	Price	Feature			
		Camera	MP3	FM Radio	Video
Astra	£24.97	✓			
Crystal	£24.97	✓			✓
Pixar	£39.97	✓	✓	✓	
Spark	£34.23	✓		✓	✓
Tacco	£34.97	✓	✓	✓	✓

(a) Which of the five mobile phones is the most expensive?

Pixar

(1)

(b) Which of the mobile phones have MP3?

Pixar & Tacco.

(1)

(c) Which mobile phone has Video but not FM Radio?

Crystal

(1)

(Total 3 Marks)

Question 11

Here is the price list at Pete's café.

Susan buys

> two cups of tea,
> a sausage roll and
> a sandwich.

She pays with a £10 note.

(a) How much change should she get?

<table>
<tr><td colspan="2">**Pete's Café**</td></tr>
<tr><td colspan="2">Price List</td></tr>
<tr><td>Cup of Tea</td><td>£1.25</td></tr>
<tr><td>Cup of Coffee</td><td>£1.75</td></tr>
<tr><td>Can of Cola</td><td>95p</td></tr>
<tr><td>Filled roll</td><td>£2.25</td></tr>
<tr><td>Sandwiches</td><td>£2.95</td></tr>
<tr><td>Sausage roll</td><td>£1.75</td></tr>
</table>

$2 \times 1.25 = 2.50$
1.75
2.95
7.20 ①

10.00
− 7.20
2.80 ①

£ ....2.80..........(3)

Jodie stops at Pete's café.
She only has £3.60 in her purse.

She wants to buy a drink and something to eat.

(b) List the 5 possible combinations Jodie can afford to buy.

Tea	and	Filled Roll	£3.50
Tea	and	Sausage Roll	£3.00
Coffee	and	Sausage Roll	£3.50
Cola	and	Filled Roll	£3.20
Cola	and	Sausage Roll	£2.70

All correct ③
4 correct ②
3 correct ①

(3)

(Total 6 Marks)

Question 12

Complete this bill:

Gary's Auto Repairs

Description	Number	Cost of each item	Total	
Spark plug	4	£2.50	£ 10.00	
Wiper blade	2	£1.50	£ 3.00	(1)
Light bulb	2	£ 2.50	£ 5.00	(1)
Labour charge 1½ hours at £ 16.00 an hour			£ 24.00	(1)
		Total cost	£ 42.00	(1)

(Total 4 marks)

Question 13

The diagram shows some letters on some cards.

| A | A | A | A |

| B | B | B |

| C | C | C |

| D |
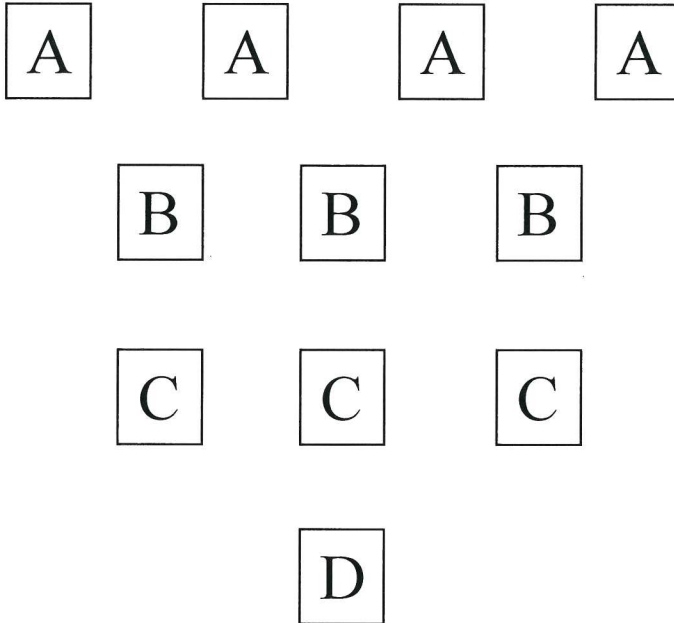
Tamara takes a card at random.

(a) Which letter is most likely to be on the card?

A

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

(b) Which letter is least likely to be on the card?

D

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

(Total 2 Marks)

Question 14

Here is a set of data:

$$3, \quad 6, \quad 4, \quad 5, \quad 9, \quad 3$$

a.) Find the mean for this set of data:

$$\frac{3+6+4+5+9+3}{6} \quad ①$$

$$= \frac{30}{6}$$

$$= 5 \quad ①$$

........................(2)

b.) Find the range of this set of data:

$$① $$
$$9 - 3 = 6 \quad ①$$

........................(2)

(Total 4 marks)

END   **(60 marks)**

1st Form   Entrance Exam

Mathematics
Practice Paper 2
No Calculator

Name:......................................

School :...................................

- You must **show sufficient working** to make your methods clear.
- You should have a pen, pencil, ruler, rubber, compass & protractor
- Write in Black ink and draw in Pencil, use a ruler to draw straight lines.

Result: / 60   = ...%

Question 1

Workout the value of the following

a.)   68 x 100

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

b.)   18.9 x 1000

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

c.)   1264.2 ÷ 100

..........................(1)
(Total 3 Marks)

Question 2

Use any method to calculate the following

a.) 57 x 98

...........................(2)

b.) 65.20 - 18.43

..........................(2)
(Total 4 Marks)

Question 3

Here are 3 number puzzles, numbers a), b) and c) from an exercise. The number in each square is the sum of the numbers in the circles either side of the square. Complete the 3 puzzles.

a.) 31, 12, 17

b.) 25, 31, 43

c.) 36, 57, 32
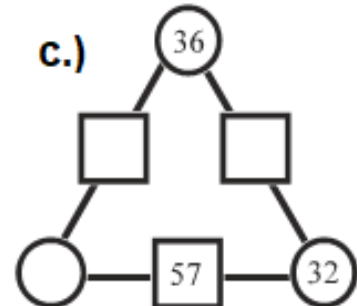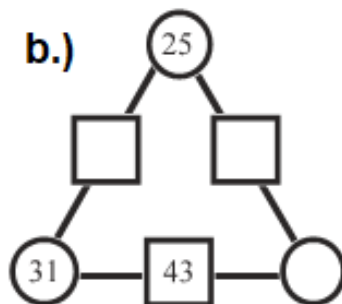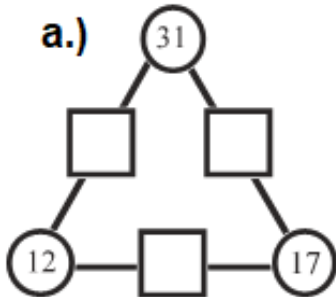
(Total 6 Marks)

Question 4

List all of the prime numbers that are greater than 10 but less than 30.

(Total 3 Marks)

Question 5

What is ¾ of 720?

....

(Total 3 marks)

Question 6

Find the Volume of the cuboid:

2 cm

7 cm

5 cm

....cm³
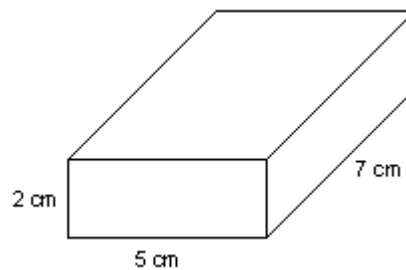
(Total 3 marks)

Question 7

Find the missing angles

a)
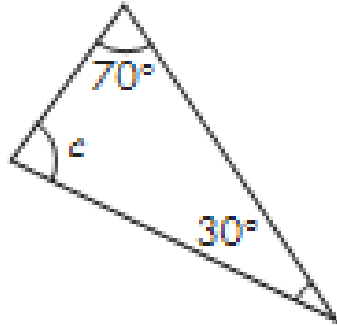
c=...........................(2)

b)

x=...........................(3)
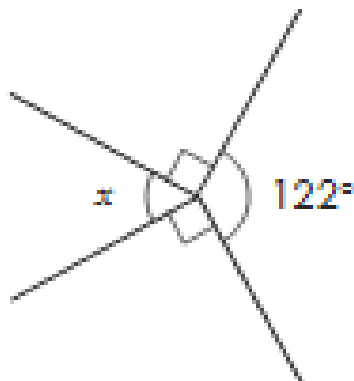
(Total 5 Marks)

Question 8

Simplify these expressions

      (a)   **2a + 5b + 4a - 2b + 6a**

....

                                                                                       (2)

      (b)   **5x - 10y - 3x - 7y**

....

                                                                                       (2)

(Total 4 Marks)

Question 9

Here is a magic square. All of the rows, columns and diagonals add up to the same number. This number is called the Magic Number. Find the Magic Number and complete the magic square

5		
	6	2
		7

Magic Number……………………………………….

(Total 3 Marks)

Question 10

Aunt Sophie has 3p and 8p stamps only.

It will cost 73p to post a parcel.

How many of each type of stamp should she put on the parcel?
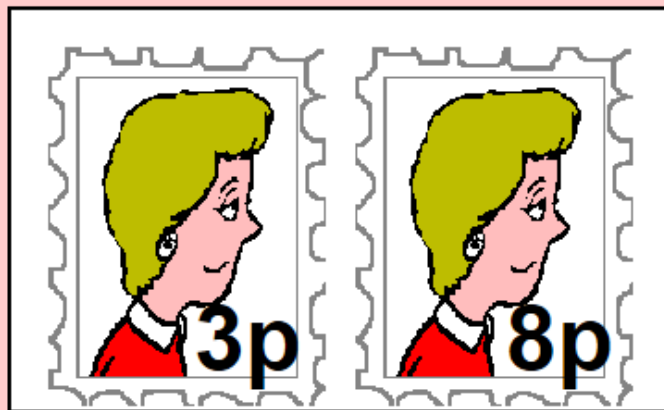
Number of 3p stamps…………………………..

Number of 8p stamps...…………………………..

(Total 4 marks)

Question 11

The running times for 5 films are listed below

2h 13mins   3h 21mins   1h 32mins   2h 1min   1h 24mins

a) Tim started watching Lord of The Rings at 6.45 pm. At what time would the film finish?

………………………………………….. (2)

b) Sophie watched Hairspray and then Shaun The Sheep Movie with a 20 minute break in between. How long after she started watching Hairspray did she finish watching Shaun The Sheep Movie?

………………………………………………..(3)

(Total 5 Marks)

Question 12

Here is the pricelist at Joe's Barbers shop.

Joe's Barbers	
Price List	
Dry Cut	£ 9.00
Wet Cut	£10.00
Cut & Shave	£12.00
Re-style	£16.00

a) On Saturday morning Joe did 5 Wet Cuts, 3 Dry cuts and 1 restyle
   How much did Joe collect in total from his customers?

£ ………………….(2)

b) On Saturday afternoon Joe only offers Cut & Shave or Dry Cuts. He collected £87
   in total from his customers. If 5 customers had a Cut & Shave how many
   customers had Dry Cuts?

£ …………….(3)
(Total 5 Marks)

Question 13

Paul is looking at three houses on a street that are next to each other. They are on the side where all of the houses are even numbered. He looks at the house numbers on their doors and adds them together and they add up to 78. What are the numbers on the doors of the three houses?

....

(Total 4 Marks)

Question 14

Umni rolls a fair regular dice.

(a)   **What is the probability she will roll a 6?**

………………(1)

(b)   What is the probability she will roll a prime number?

…………….(2)
(Total 3 Marks)

Question 15

Daniel carried out a survey of his friends' favourite flavour of crisps. Here are the results.

Plain	Chicken	Bovril	Salt & Vinegar	Plain
Salt & Vinegar	Plain	Chicken	Plain	Bovril
Plain	Chicken	Bovril	Salt & Vinegar	Bovril
Bovril	Plain	Plain	Salt & Vinegar	Plain

(a)   **Complete the Tally Chart to show Daniel's results.**   **(3)**

Flavour of crisps	Tally	Total
Plain		
Chicken		
Bovril		
Salt & Vinegar		

(b)   **Write down the number of Daniel's friends whose favourite flavour was Salt & Vinegar.**

………………………….. **(1)**

(c)   Which was the most popular flavour overall?

………………………….. **(1)**

(Total 5 Marks)

END   **(60 marks)**

1ˢᵗ Form   Entrance Exam

DENSTONE COLLEGE

Mathematics
Practice Paper 2
No Calculator

Name:......Solutions......................

School :..................................

- You must **show sufficient working** to make your methods clear.
- You should have a pen, pencil, ruler, rubber, compass & protractor
- Write in Black ink and draw in Pencil, use a ruler to draw straight lines.

Result: / 60 = ...%

Question 1

Workout the value of the following

a.)   68 x 100

6800 ....(1)

b.)   18.9 x 1000

18900 ....(1)

c.)   1264.2 ÷ 100

12·642 ....(1)

(Total 3 Marks)

Question 2

Use any method to calculate the following

a.) 57 x 98

$$\begin{array}{r} 98 \\ \times 57 \\ \hline 56 \\ 630 \\ 400 \\ 4500 \\ \hline 5586 \end{array}$$

5586 ....(2)

b.) 65.20 - 18.43

$$\begin{array}{r} 5\overset{6}{\cancel{6}}\overset{14}{\cancel{8}}.\overset{11}{\cancel{2}}\overset{10}{\cancel{0}} \\ 18 \cdot 43 \\ \hline 46 \cdot 77 \end{array}$$

46·77 ....(2)

(Total 4 Marks)

Question 3

Here are 3 number puzzles, numbers a), b) and c) from an exercise. The number in each square is the sum of the numbers in the circles either side of the square. Complete the 3 puzzles.

a.)
- (31)
- [43] [48]
- (12) — [29] — (17)

b.)
- (25)
- [66] [37]
- (31) — [43] — (12)

c.)
- (36)
- [61] [68]
- (25) — [57] — (32)
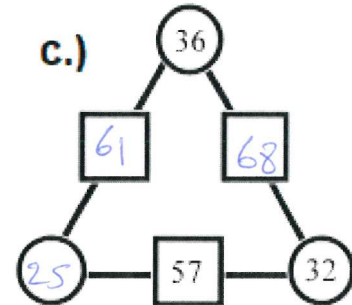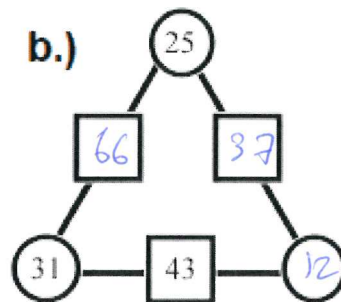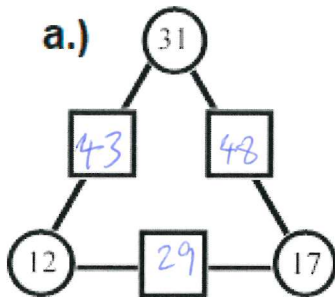
<div align="right">(Total 6 Marks)</div>

Question 4

List all of the prime numbers that are greater than 10 but less than 30.

11, 13, 17, 19, 23, 29

<div align="right">(Total 3 Marks)</div>

Question 5

What is ¾ of 720?

① $\frac{720}{4} = 180$

① $180 \times 3 = 540$ ①

....

(Total 3 marks)

Question 6

Find the Volume of the cuboid:
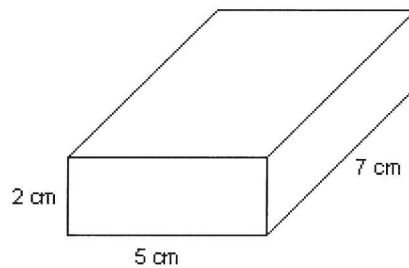
$7 \times 5 \times 2$ ①

$= 70 \ cm^3$ ②

....cm³

(Total 3 marks)

Question 7
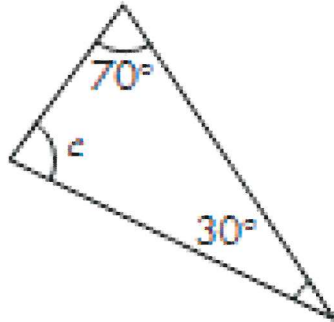
Find the missing angles

a)

$70°$

c

$30°$

$180 - (70 + 30)$

$= 180 - 100$

$= 80°$

80

c=.............................(2)

b)

90

x

$122°$

90

①

360
-180
180

180
-122
58 ①

①

58

x=.............................(3)
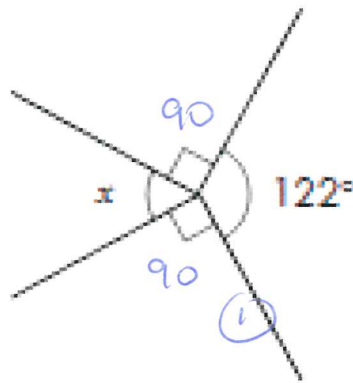
(Total 5 Marks)

Question 8

Simplify these expressions

    (a)   2a + 5b + 4a - 2b + 6a

$$12a + 3b$$

    ①   ①

....
             (2)

    (b)   5x - 10y - 3x - 7y

$$2x - 17y$$

    ①   ①

....
             (2)

(Total 4 Marks)

Question 9

Here is a magic square. All of the rows, columns and diagonals add up to the same number. This number is called the Magic Number. Find the Magic Number and complete the magic square

5	4	9
10	6	2
3	8	7

① each 2 correct.

Magic Number..

(Total 3 Marks)

Question 10

Aunt Sophie has 3p and 8p stamps only.

It will cost 73p to post a parcel.

How many of each type of stamp should she put on the parcel?
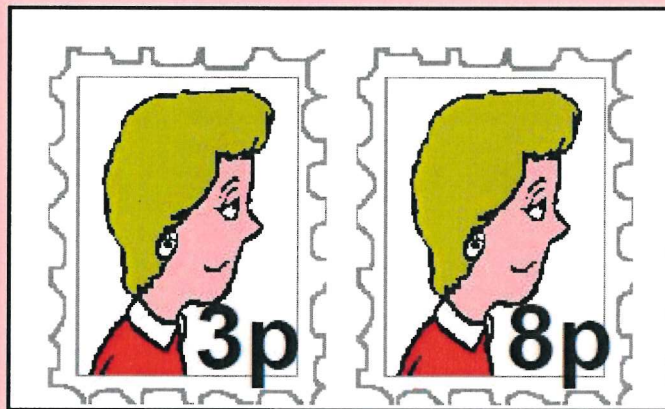
$$8 \times 8 = 64 \quad \text{①}$$
$$3 \times 3 = \underline{9} \quad \text{①}$$
$$73$$

Number of 3p stamps......3...①.....
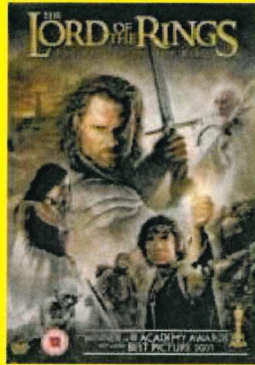
Number of 8p stamps......8...①.....

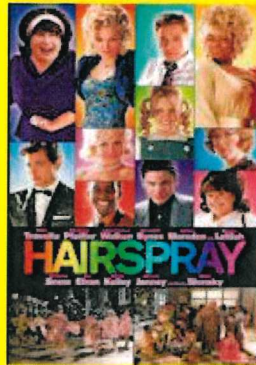(Total 4 marks)

Question 11
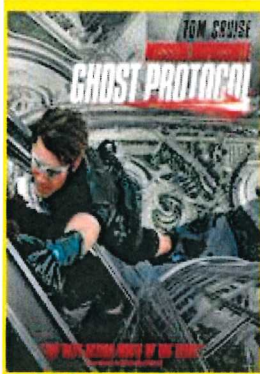
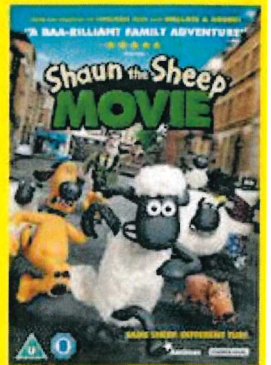The running times for 5 films are listed below

| 2h 13mins | 3h 21mins | 1h 32mins | 2h 1min | 1h 24mins |

a) Tim started watching Lord of The Rings at 6.45 pm. At what time would the film finish?

```
   6:45
+  3:00
  ──────
   9:45
+     15      (1)
  ──────
  10:00
+     06
  ──────
  10:06
```

(1)

10:06 pm

.... (2)

b) Sophie watched Hairspray and then Shaun The Sheep Movie with a 20 minute break in between. How long after she started watching Hairspray did she finish watching Shaun The Sheep Movie?

```
   1:32
+  0:20      (1)
  ──────
   1:52
+  1:24
  ──────     (1)
   2:76

=  3:16
```

(1)

3h 16

....(3)

(Total 5 Marks)

Question 12

Here is the pricelist at Joe's Barbers shop.

Joe's Barbers

Price List

Dry Cut	£ 9.00
Wet Cut	£10.00
Cut & Shave	£12.00
Re-style	£16.00

a) On Saturday morning Joe did 5 Wet Cuts, 3 Dry cuts and 1 restyle
   How much did Joe collect in total from his customers?

$$5 \times 10 = 50$$
$$3 \times 9 = 27 \quad ①$$
$$1 \times 16 = \underline{16}$$
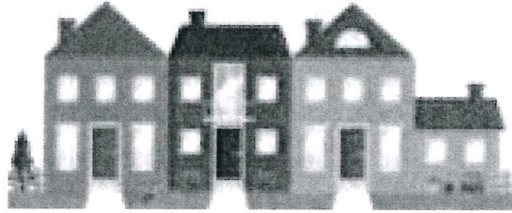$$93$$

$$①$$
$$93$$

£ ....93........(2)

b) On Saturday afternoon Joe only offers Cut & Shave or Dry Cuts. He collected £87 in total from his customers. If 5 customers had a Cut & Shave how many customers had Dry Cuts?

$$5 \times 12 = 60 \quad ①$$

$$87 - 60 = 27 \quad ①$$

$$27 \div 9 = 3$$

3 customers ①

£ ....(3)
(Total 5 Marks)

Question 13

Paul is looking at three houses on a street that are next to each other. They are on the side where all of the houses are even numbered. He looks at the house numbers on their doors and adds them together and they add up to 78. What are the numbers on the doors of the three houses?
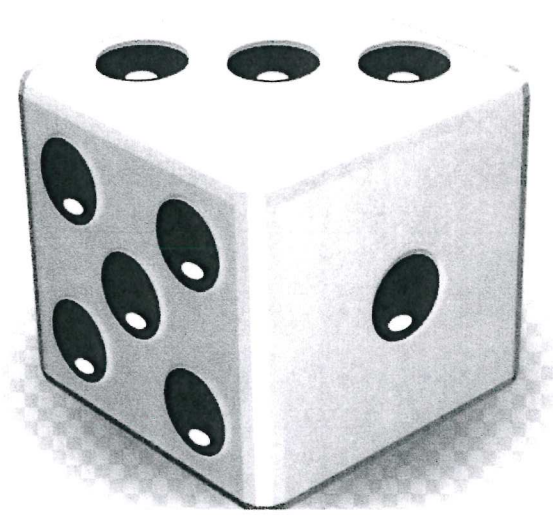
$$78 \div 3 = 26 \quad ①$$

$$\underset{24}{①} , \underset{26}{①} , \underset{28}{①}$$

....

(Total 4 Marks)

Question 14

Umni rolls a fair regular dice.

(a)   What is the probability she will roll a 6?

$1/6$

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

(b)   What is the probability she will roll a prime number?

2, 3, 5   ③

$1/2$

.................(2)

(Total 3 Marks)

Question 15

Daniel carried out a survey of his friends' favourite flavour of crisps. Here are the
  results.

Plain	Chicken	Bovril	Salt & Vinegar	Plain
Salt & Vinegar	Plain	Chicken	Plain	Bovril
Plain	Chicken	Bovril	Salt & Vinegar	Bovril
Bovril	Plain	Plain	Salt & Vinegar	Plain

(a)   Complete the Tally Chart to show Daniel's results.   (3)

Flavour of crisps	Tally	Total
Plain	IIII III	8
Chicken	III	3
Bovril	IIII	5
Salt & Vinegar	IIII	4

(2) 3 correct
(1) 2 correct.

(b)   Write down the number of Daniel's friends whose favourite flavour was Salt
& Vinegar.

4
.... (1)

(c)   Which was the most popular flavour overall?

Plain.
.... (1)

(Total 5 Marks)

END   (60 marks)