



11+ Admission  
Arrangements  
and  
Information for  
Entry

September 2013

Date of examination  
29th September 2012

Lancaster Girls' Grammar School



# Contents

Headteacher's Introduction .....	3
Timetable for 2013 entry .....	4
Admissions Policy .....	5
Map Showing the Lancaster District .....	7
Applications for Admission .....	8
Sample Test Papers .....	14
<i>Mathematics Test 1</i> .....	15
<i>Mathematics Test 2</i> .....	22
<i>Answers</i> .....	31



# Headteacher's Introduction

Dear Parents

Thank you for your interest in Lancaster Girls' Grammar School. This booklet is designed to assist parents to understand the admissions process and to provide information about the entrance tests at Lancaster Girls' Grammar School. The booklet contains examples of past papers and a registration form. It should be read in conjunction with your Local Authority's admission documentation. Lancashire Local Authority will be distributing their admission booklets and details of how to apply for school places to parents of all year 6 pupils attending Lancashire maintained primary schools during the week commencing Monday 3rd September 2012. There is also an on-line site at [www.lancashire.gov.uk/e-admissions](http://www.lancashire.gov.uk/e-admissions).

As last year, we are holding our entrance tests in September. Part of our rationale for doing so is to ensure that parents know whether their daughter has reached the required standard for Lancaster Girls' Grammar School before they fill in the common application form for their Local Authority. All four grammar schools in Lancashire will be holding their entrance tests on the same day, Saturday 29th September 2012. From talking to parents and primary headteachers I know that parents have welcomed knowing the outcome of the entrance tests before deciding on their choice of secondary school for their daughter. It is very important that if you wish your daughter to sit the entrance tests, you must return the registration form no later than noon on Wednesday 19th September 2012. Otherwise your daughter will not be able to sit our entrance tests and therefore cannot be allocated a place at Lancaster Girls' Grammar School.

We are holding an Information Evening for year 5 parents on Thursday 31st May. Our Open Evening for Year 5 pupils and their parents is on Thursday 28th June 2012 from 5.30 to 8.00 pm. The admissions procedure will be explained during both these evenings. You can also find out more information about Lancaster Girls' Grammar School by visiting our website [www.lggs.org.uk](http://www.lggs.org.uk) where you will find our online prospectus.

Please do not hesitate to contact me if there is anything that requires further explanation or clarification. We will try to offer you all, every possible assistance in trying to make the best choice for your daughter.

Yours sincerely,

*Mrs Jackie Cahalin*

Headteacher



# Timetable for 2013 Entry

- Thursday 31st May 2012** Information Evening for Year 5 parents.  
There will be 2 separate sessions - 6.30pm and 7.30pm
- Thursday 28th June 2012** Open Evening for September 2013 entry.  
The Open Evening is for Year 5 pupils and their parents.  
The school is open from 5.30 to 8.00pm.
- Monday 3rd September 2012** Lancashire LA composite admissions prospectus circulated to parents (via primary schools).
- Wednesday 19th September 2012** **Closing date for registration/application forms for LGGS. This form must be returned directly to the Headteacher by noon on Wednesday 19th September to ensure that your daughter is registered for the entrance tests.**
- Saturday 29th September 2012** **Entrance tests at Lancaster Girls Grammar School - 9.30 am.**
- By Monday 15th October 2012** **Test results to parents.**
- By Wednesday 31st October 2012** For Year 6 pupils, residing in Lancashire and attending Lancashire maintained primary schools, parents will be required to return the completed Lancashire LA Common Application form to the child's current school or make an online application. Parents of children not attending Lancashire maintained primary schools must return the form to the appropriate Area Education Office within Lancashire. All parents must return their completed applications by **Wednesday 31st October 2012**. If you are not applying online you will need to return the hard copy to your daughter's primary school before half term.
- On Friday 1st March 2013** The LA will write to every parent in Lancashire who completed an application on behalf of all Lancashire maintained secondary schools, to inform them of their allocated secondary school place.



# Admission Policy September 2012

## 1. Size of School

112 girls will be admitted at 11+. Pupils will continue to be admitted to other age groups if they fulfil the criteria listed below and provided their admission does not prejudice the efficient education and use of resources.

## 2. Admission of Pupils

In order to preserve the established character and high academic reputation of the school, the aim shall be to provide places for girls selected according to ability and aptitude. The Governors will admit girls who fall within the upper quartile of ability selected by means of entrance tests. A review system may be used to consider whether girls who have marginally failed to reach the required standard in the entrance tests are of high enough ability to be offered a place.

## 3. Catchment Area

Traditionally the school has drawn its pupils not only from Lancaster but from places further afield within travelling distances.

### a) *Priority Areas*

In allocating places the Governors will first give priority to Looked after Girls who reside within the City of Lancaster at the time of the application.

Girls who reside within the boundaries of the City of Lancaster at the time of application will then be given priority. (See map)

### b) *“Residual” Places*

In allocating residual places the Governors will give priority to Looked after Girls.

Places may then be offered to those residing outside the City of Lancaster but within reasonable travelling distance after the needs of those residing in the City have been met. Distance will be measured using a computerised measuring system from home front door to school main entrance.

In considering requests in respect of children with otherwise equal claims, the distance of their home from the school and the scores achieved in the entrance tests will be taken into account.

Where a pupil lives with one parent for part of the week and the rest of the week with the second parent, only one address can be used for application. This will normally be the address to which Child Benefit is paid.

To establish residential status in the school's catchment area requires that the family permanently reside within the designated area shown in the map before the closing date for applications. Permanent residency is defined as owner occupancy or long-term letting contract of a residential property where child benefit and occupied community charge is paid (evidence may be required). In the case of a recent change of address, additional evidence will be required in the form of evidence of exchange of contracts or a signed tenancy agreement. This is in addition to the child benefit statement and evidence of occupied community charge. Families whose first home is outside the catchment area and/or who are only living in short-term rented property or temporarily with friends or relatives in the area will be deemed to live outside the catchment area.

Proof of residence may be requested at any time throughout the admissions process. If it is subsequently discovered that an application contains a falsely claimed or dated address, then any offer of a place will be withdrawn.



# Admission Policy

## **4. Waiting Lists**

The waiting list gives priority to children in accordance with the school's published oversubscription criteria and not on any other basis. The waiting list will be maintained for the full autumn term in the academic year of admission. Priority will not be given to children based on the date either their application was received or their name was added to the list.

## **5. Late applications**

Parents or guardians of pupils for year 7 who move into the area after the closure date for submission of the Common Application Form must complete a LA Common Application Form before applying to the school for them to be assessed. If the child reaches a level comparable to pupils who have already been admitted and no places are available, the candidate's name will be placed on the waiting list.

## **6. Appeals**

A parent or guardian may appeal against the decision of the Governors to an Appeal Committee appointed under the prevailing Government legislation. The decision of the Appeal Committee shall be binding on the Governors and on the parents.

## **Co-ordinated Admissions Policy**

All parents must list Lancaster Girls' Grammar School as one of their three preferences on the LA form. All preferences will be considered equally by all admission authorities and if places at more than one school could be offered the LA will allocate the school ranked highest by parents on their application. In addition, parents must complete a Lancaster Girls' Grammar School entrance tests registration form which must be returned to LGGS no later than noon on Wednesday 14<sup>th</sup> September. The Entrance examination for this school takes place on Saturday 24<sup>th</sup> September 2011.

## **Entry to the Sixth Form**

Applications for admission to the school's Sixth Form are welcome from all Year 11 applicants. Details of requirements are published each year in the Sixth Form Prospectus. These include a general requirement and specific subject requirements. All applicants, both internal and external, must meet the academic entry requirement for the courses which they wish to take. There is an expectation that applicants will have shown a commitment to learning at their present school.

In the event of over-subscription, in terms of external students wishing to join the sixth form, GCSE performance and suitability for chosen A level courses may be used to allocate places. The school welcomes up to 70 students from outside the school to join the existing LGGS students who wish to continue into the Sixth Form.

Students must submit their application form (to be found in the Sixth Form Prospectus and on the website) by the published closing date in order to be eligible for entry. Appeals against Governors' decisions on admissions will be held by an independent panel.



# City of Lancaster District

Girls who reside in this area will be given priority of entry







# Applications for Admission

## Applications for Admission at 11+

The Governors welcome applications from the parents of girls born between 1st September 2001 and 31st August 2002. Applications will be considered for admission to Year 7 from parents of girls born after 31st August 2002 but the Governors will require evidence of **exceptional** academic ability together with adequate social and physical development to enable such girls to benefit from early entry.

### Application forms

Parents will need to complete two separate forms.

#### *LA Common Application Form*

The Local Authority (LA) in which you live will provide a Common Application Form. Copies of this will be circulated to the parents of all Year 6 pupils attending Lancashire maintained primary schools in early September 2012.

Parents of girls who do not attend such schools will need to obtain the corresponding form from their home LA.

Parents will be invited to state on the Common Application Form the names of up to three secondary schools in priority order and this order of preferences will be crucial.

#### *LGGS Registration Form*

This form registers your daughter for the entrance exam.

This is available directly from LGGS and should be returned to the Headteacher at LGGS by 12 noon on Wednesday 19th September. Further information will be sent to you within 5 days of the school receiving the registration form.

### Further Information

#### How will I know if my daughter has reached the required standard in the entrance tests?

Your daughter will sit the tests on Saturday 29th September 2012. The tests are marked in school. The Governors' Admissions committee then consider which girls are deemed suitable for a grammar school education and which girls can be admitted into the school, applying the oversubscription criteria when necessary.

For District places (i.e. girls who reside within the boundaries of the City of Lancaster at the time of application) the process is relatively straightforward. Parents will receive a letter informing them whether their daughter has reached the required standard by Monday 15th October 2012. If the pupil has reached the required standard, this means that there is a place for your daughter at LGGS. If the pupil has not reached the required standard, unfortunately the Admissions Committee cannot allocate a place at LGGS. Parents will be told the scores, when the required standard has not been reached. We do not release test scores for the pupils who have reached the required standard as we feel they should start at LGGS on an equal footing.





# Applications for Admission

For Residual places (those residing outside the City of Lancaster but within reasonable travelling distance) the process is a little more complicated as we tend to be oversubscribed i.e. more pupils reach the required standard than we have places. Residual places are only allocated once the needs of the pupils residing in the city have been met. In allocating places to girls who are of the required standard the Governors' Admissions Committee give priority to looked after children. They will then consider distance from home to school and scores achieved.

Residual parents will receive a letter from LGGS by Monday 15th October. This letter will be one of the following options.

1. Pupil has reached the required standard and has been allocated a place at LGGS.
2. Pupil has reached the required standard but the Admissions Committee has been unable to allocate a place as all 112 places have been filled. In this case the parents will be informed of their daughter's ranking so they know where she is on the 'waiting list'. Past experience shows that many girls in this situation will eventually be allocated a place at LGGS as within the 112 places allocated will be girls who do not actually start at LGGS for various reasons e.g. families move away.
3. Pupil has not reached the required standard and cannot be allocated a place at LGGS.

## How does the equal preference scheme work?

The Local Authority Common Application Form requires parents to nominate three schools in order of preference. Once the various admissions criteria have been applied by the nominated schools, some pupils may be eligible for places at more than one school. The Local Authority will always allocate places by reference to the parents' order of preference as expressed on the Common Application Form. It is important that parents realise that the school which can offer a place and is listed highest in priority on the form will be the school which will be offered to parents on 1<sup>st</sup> March 2013. Therefore it is impossible to guarantee a place at LGGS unless LGGS is entered as first priority on the Local Authority form.

- A.** Preference 1 LGGS - Governors tell LA to offer a place  
Preference 2 Morecambe High - eligible for a place  
Preference 3 Ripley - Governors tell LA to offer a place

**Outcome** - LA allocates LGGS

- B.** Preference 1 Queen Elizabeth, Kirkby Lonsdale - Governors tell LA to offer a place  
Preference 2 LGGS - eligible for a place  
Preference 3 Central High School -

**Outcome** - LA allocates Queen Elizabeth



# Applications for Admission

Please note that as parents know the outcome of the entrance tests before completing their form, they will find it difficult to appeal against the Local Authority decision should they later decide they want their daughter to attend LGGS.

## **What should I do if my daughter is ill on the test day?**

If your daughter is totally incapable of sitting the tests on the day you need to take her to the doctor as soon as possible and obtain a note stating that she was unfit. You must telephone the school to let us know what has happened either on the morning of 29th September or 1st October at the latest and provide us with a copy of the certificate. We will then make arrangements for your daughter to sit the test as soon as possible. This will normally have to be within a week of the original date.

## **What should I do if I think my daughter's performance in the entrance tests may have been affected by certain factors?**

If your daughter has any special needs such as a hearing or visual impairment it is important that you tell us about this well before the tests so we can make the necessary adjustments.

If your daughter has a medical condition which may affect her performance, again it is important that we know about this beforehand. If she has been ill before the test or is poorly on the day, it is important that you let us know, in writing with medical evidence, no later than Wednesday 3rd October. The Governors Admissions Committee will review individual cases and will look at and consider any special circumstances. As part of this review the headteacher of your daughter's primary school may be contacted and asked for details of KS1 results and any other relevant primary test results. Similarly if your daughter's performance may have been affected by other factors apart from medical issues, you must let us know in writing by Wednesday 3rd October.

## **Priority of entry**

Under the Governors' revised admissions procedures, priority of entry is now given to girls who reside within the Lancaster and District area (see map). Note that this extends the priority area covered prior to 2005.

## **The Entrance Tests**

As an Academy, the responsibility for the arrangements for 11+ assessment lies with the Governors.

**The examination is held on Saturday 29th September 2012.**



# Applications for Admission

## Entrance Tests – Mathematics

This test lasts for 35 minutes, and consists of 35 multiple-choice questions.

Two sample copies of Mathematics tests are included in this booklet. For your information, “target” scores representing an approximate threshold for entry on these two papers were as follows:

Mathematics Specimen Test 1	70%
Mathematics Specimen Test 2	65%

Please note however that these are only guidelines. When allocating places, the Governors will pay particular attention to the total mark when the marks on the three papers are added together. Therefore a lower mark in one paper may be outweighed by a mark higher than the “target” score in one or both of the other two papers.

Tests in Mathematics are available for you to purchase from major bookstores.

Please ensure that you get the 11+/12+ papers, not the 9+/10+ version.

Please note also that these are purely practice tests - they are not intended to be discriminating in selecting the top of the ability range. Your daughters will find the LGGS papers broadly similar, but more difficult.

### Answer Sheet:

The Maths paper is multiple-choice, with the answers recorded on an OMR answer sheet (see example). Candidates are carefully briefed on how to record their answers with a pencil line.

## Entrance Tests – English

NB: We are using a GL Assessment English paper this year. The paper consists of two extracts with questions, plus questions on spelling, punctuation and grammar. The test comprises of 50 multiple-choice questions, to be answered in 50 minutes.

## Entrance Tests – Verbal Reasoning

The test comprises of 80 multiple-choice questions, to be answered in 50 minutes.

The papers used in the English and Verbal Reasoning LGGS entry tests are obtained from an educational foundation and are copyright. We cannot therefore include a past paper in the admissions handbook. We do have “An Introduction to GL Assessment - Verbal Reasoning” and “An Introduction to GL Assessment - English”, available from the school.

### Answer Sheets:

The Verbal reasoning and English papers are also multiple choice and answers are recorded on a GL Assessment answer sheet, again due to copyright there is not an example in this booklet.



# Applications for Admission

## EDPAC ANSWER SHEET

### Lancaster Girls' Grammar School Mathematics Test - Answer Sheet

Name:

Pupil Number:

Date of Birth:

Exam Room:

Please mark your answer with a line like this: Use an HB pencil. Carefully rub out any mistakes.

Qn 1	Qn 2	Qn 3	Qn 4	Qn 5	Qn 6
A 680 <input type="checkbox"/>	A 448 <input type="checkbox"/>	A The angles are all right angles <input type="checkbox"/>	A 1/2 <input type="checkbox"/>	A 2 <input type="checkbox"/>	A 7 <input type="checkbox"/>
B 6.8 <input type="checkbox"/>	B 6 <input type="checkbox"/>	B Opposite sides are parallel <input type="checkbox"/>	B 3/4 <input type="checkbox"/>	B 15 <input type="checkbox"/>	B 8 <input type="checkbox"/>
C 6800 <input type="checkbox"/>	C 7 <input type="checkbox"/>	C All the sides are equal in length <input type="checkbox"/>	C 2/5 <input type="checkbox"/>	C 22 <input type="checkbox"/>	C 32 <input type="checkbox"/>
D 68000 <input type="checkbox"/>	D 8 <input type="checkbox"/>	D The diagonals are equal in length <input type="checkbox"/>	D 3/5 <input type="checkbox"/>	D 30 <input type="checkbox"/>	D 72 <input type="checkbox"/>

Qn 7	Qn 8	Qn 9	Qn 10	Qn 11	Qn 12
A 39 <input type="checkbox"/>	A 18 <input type="checkbox"/>	A 33 <input type="checkbox"/>	A N <input type="checkbox"/>	A £2.17 <input type="checkbox"/>	A 7 <input type="checkbox"/>
B 46 <input type="checkbox"/>	B 45 <input type="checkbox"/>	B 27 <input type="checkbox"/>	B S <input type="checkbox"/>	B £1.25 <input type="checkbox"/>	B 25 <input type="checkbox"/>
C 8 <input type="checkbox"/>	C 54 <input type="checkbox"/>	C 24 <input type="checkbox"/>	C E <input type="checkbox"/>	C £2.59 <input type="checkbox"/>	C 20 <input type="checkbox"/>
D 7 <input type="checkbox"/>	D 72 <input type="checkbox"/>	D 18 <input type="checkbox"/>	D Z <input type="checkbox"/>	D £2.45 <input type="checkbox"/>	D 28 <input type="checkbox"/>

Qn 13	Qn 14	Qn 15	Qn 16	Qn 17	Qn 18	Qn 19
A £18.80 <input type="checkbox"/>	A 24 <input type="checkbox"/>	A 14°C <input type="checkbox"/>	A 48 cm <input type="checkbox"/>	A 140 <input type="checkbox"/>	A 136 <input type="checkbox"/>	A 34 <input type="checkbox"/>
B £33.20 <input type="checkbox"/>	B 10 <input type="checkbox"/>	B 8°C <input type="checkbox"/>	B 46 cm <input type="checkbox"/>	B 1500 <input type="checkbox"/>	B 26 <input type="checkbox"/>	B 33 <input type="checkbox"/>
C £29.60 <input type="checkbox"/>	C 2 <input type="checkbox"/>	C 4°C <input type="checkbox"/>	C 92 cm <input type="checkbox"/>	C 1410 <input type="checkbox"/>	C 24 <input type="checkbox"/>	C 10 <input type="checkbox"/>
D £19.80 <input type="checkbox"/>	D 16 <input type="checkbox"/>	D 6°C <input type="checkbox"/>	D 56 cm <input type="checkbox"/>	D 1400 <input type="checkbox"/>	D 440 <input type="checkbox"/>	D 37 <input type="checkbox"/>

Qn 20	Qn 21	Qn 22	Qn 23	Qn 24	Qn 25
A £2130 <input type="checkbox"/>	A 107 km <input type="checkbox"/>	A 768 km <input type="checkbox"/>	A 664 km <input type="checkbox"/>	A 76 <input type="checkbox"/>	A £1.72 <input type="checkbox"/>
B £6420 <input type="checkbox"/>	B 207 km <input type="checkbox"/>	B 384 km <input type="checkbox"/>	B 6600 km <input type="checkbox"/>	B 94 <input type="checkbox"/>	B £2.05 <input type="checkbox"/>
C £6390 <input type="checkbox"/>	C 2511 km <input type="checkbox"/>	C 1728 km <input type="checkbox"/>	C 6630 km <input type="checkbox"/>	C 54 <input type="checkbox"/>	C £2.15 <input type="checkbox"/>
D £8445 <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>

Qn 26	Qn 27	Qn 28	Qn 29	Qn 30
A £2.05 <input type="checkbox"/>	A 30 kg <input type="checkbox"/>	A 15 km <input type="checkbox"/>	A 1.7 cm <input type="checkbox"/>	A 20 miles <input type="checkbox"/>
B £3.05 <input type="checkbox"/>	B 34 kg <input type="checkbox"/>	B 1.5 km <input type="checkbox"/>	B 68 cm <input type="checkbox"/>	B 5 1/4 miles <input type="checkbox"/>
C £2.75 <input type="checkbox"/>	C 44 kg <input type="checkbox"/>	C 150 metres <input type="checkbox"/>	C 3.4 cm <input type="checkbox"/>	C 7 1/2 miles <input type="checkbox"/>
D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>

Qn 31	Qn 32	Qn 33	Qn 34	Qn 35
A £42.50 <input type="checkbox"/>	A £26.25 <input type="checkbox"/>	A 2 <input type="checkbox"/>	A £15 <input type="checkbox"/>	A £4 <input type="checkbox"/>
B £36.25 <input type="checkbox"/>	B £25.25 <input type="checkbox"/>	B 3 <input type="checkbox"/>	B £9 <input type="checkbox"/>	B £14 <input type="checkbox"/>
C £43.50 <input type="checkbox"/>	C 31.50 <input type="checkbox"/>	C 4 <input type="checkbox"/>	C £57 <input type="checkbox"/>	C £16 <input type="checkbox"/>
D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>	D (not given) <input type="checkbox"/>



# Applications for Admission

*The following information for parents has been provided by GL Assessment*

## **GL Assessment Verbal Reasoning and English PRACTICE PAPERS TESTS FOR 11+ PREPARATION**

*GL Assessment publishes tests used in the admissions procedure by Lancaster Girls' Grammar School. We are therefore in a unique position to provide authentic materials to help your child prepare.*

*In particular, GL Assessment Practice Papers provide:*

### **Genuine difficulty**

*Most alternative tests are simply too easy, and do not reflect the difficulty of the questions used in the real tests*

### **Authentic design**

*Question design, practice items, written and oral instructions are all just as your child will encounter in the real tests*

### **Appropriate answer format and coverage**

*This year Lancaster Girls' Grammar School will be using 'multiple choice format' tests, with children placing their answers on a separate sheet*

*The most appropriate packs from the range of GL Assessment Practice Papers are as follows:*

<b>Pack Name</b>	<b>Contents</b>	<b>ISBN</b>	<b>Price</b>
Multiple Choice Verbal Reasoning Pack 2	Includes four different tests	978-0-7087-2049-3	£9.99
Multiple Choice English Pack 2	Includes four different tests	978-0-7087-2046-2	£9.99

***These Packs are part of a full range of  
GL Assessment Practice Papers  
Available from larger branches of WH Smiths and other major bookstores.***

***NB: Other similar practice papers are available from a range of publishers.***

The above Verbal Reasoning and English packs will be available to purchase at the Information Evening for Year 5 parents on Thursday 31st May 2012.



# 11+ Admission Sample Papers



**LANCASTER GIRLS' GRAMMAR SCHOOL**

**MATHEMATICS**

**SPECIMEN TEST 1**

35 minutes

Write your name using BLOCK CAPITALS in the box below:

Read this before you start,

There are thirty five Mathematical questions for you to read through. There are four responses, **A,B,C** and **D** given for each question, but only one of these answers is correct. Choose the answer that you think is better than the others and make a **firm** pencil mark – **ACROSS** the appropriate letter on the answer sheet.

If you wish to change an answer be sure to **rub out** the pencil mark completely before marking another letter.

You are provided with an HB pencil, a rubber and an answer sheet.

**DO ANY WORKING ON THE QUESTION PAPER IF REQUIRED**

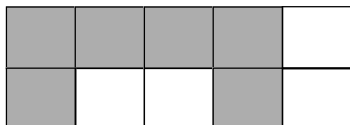
**DO NOT START UNTIL YOU ARE TOLD**



# Sample Papers

## Mathematics Test Paper 1

- 1 A desk is 68 cm above the floor. How many millimetres is this ?  
A 680  
B 6.8  
C 6800  
D 68000
- 2 What number should replace [ ] to make the statement  $8 \times [ ] = 56$  true ?  
A 448  
B 6  
C 7  
D 8
- 3 Which of these statements about a rectangle is not necessarily true ?  
A The angles are all right angles  
B Opposite sides are parallel  
C All the sides are equal in length  
D The diagonals are equal in length
- 4 What fraction of the figure below is shaded ?



- A  $\frac{1}{2}$   
B  $\frac{3}{4}$   
C  $\frac{2}{5}$   
D  $\frac{3}{5}$
- 5 The mean (average) of four whole numbers is 16. The mean of three of them is 14. The remaining number must be  
A 2  
B 15  
C 22  
D 30
- 6 Which number should replace [ ] to make  $(8 \times 9) \times 4 = [ ] \times 36$  a true statement ?  
A 7  
B 8  
C 32  
D 72
- 7 What is the smallest whole number [ ] for which  $6 \times [ ]$  is more than 45 ?  
A 39  
B 46  
C 8  
D 7



# Sample Papers

## Mathematics Test Paper 1 (continued)

8 Which number is not a multiple of both 9 and 6 ?

- A 18
- B 45
- C 54
- D 72

9 A machine changes numbers that are put into it.

When 3 is put in, 13 comes out.

When 5 is put in, 21 comes out.

When 6 is put in, 25 comes out.

If 8 is put in, which number will come out ?

- A 33
- B 27
- C 24
- D 18

10 Which of these letters has line (mirror) symmetry?

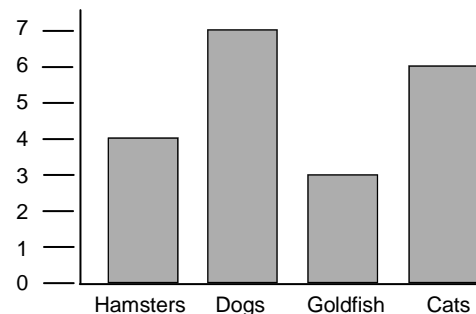
- A N
- B S
- C E
- D Z

11 Five bars of SQUELCH chocolate ice cream cost £1.75. What would seven bars cost ?

- A £2.17
- B £1.25
- C £2.59
- D £2.45

12 The bar chart shows the number of pets of each type kept by pupils in a class. How many pets did the pupils keep altogether ?

- A 7
- B 25
- C 20
- D 28



13 When Ahmed emptied his savings box, he found it contained four £2 coins, eight £1 coins, sixteen 10p coins and six 20p coins. Altogether, this amounts to

- A £18.80
- B £33.20
- C £29.60
- D £19.80



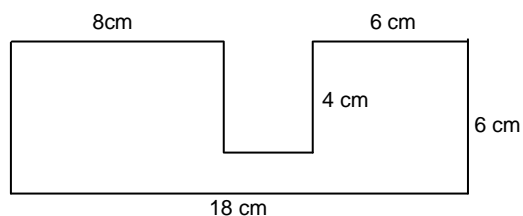
# Sample Papers

## Mathematics Test Paper 1 (continued)

- 14 Which number should replace [ ] in the number sentence  $(8 \times 6) - (8 \times 4) = 8 \times [ ]$  ?
- A 24
  - B 10
  - C 2
  - D 16

- 15 When the temperature on a mountain top is  $-3^{\circ}\text{C}$  and the valley temperature is  $8^{\circ}\text{C}$ , the valley is hotter by  $11^{\circ}\text{C}$ . If the mountain top temperature is  $-5^{\circ}\text{C}$  and the valley temperature is  $9^{\circ}\text{C}$  hotter, the valley temperature must be
- A  $14^{\circ}\text{C}$
  - B  $8^{\circ}\text{C}$
  - C  $4^{\circ}\text{C}$
  - D  $6^{\circ}\text{C}$

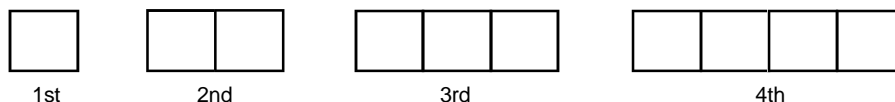
- 16 The length of the perimeter of this shape is
- A 48cm
  - B 46cm
  - C 92cm
  - D 56cm



(Not drawn to scale)

- 17 Only 1408 people turned up to watch the final of a county hockey championship. To the nearest ten, this number is
- A 140
  - B 1500
  - C 1410
  - D 1400
- 18 If I take 17 from a number and multiply the result by 8, I am left with 72. The number I started with is
- A 136
  - B 26
  - C 24
  - D 440

- 19 This sequence of patterns is made with matchsticks.



If the sequence were continued, how many matches would be used to make the 11th pattern ?

- A 34
- B 33
- C 10
- D 37



# Sample Papers

## Mathematics Test Paper 1 (continued)

- 20** Mr Lee bought a car costing £8520. He wrote a cheque for 75% of the cost and borrowed the remaining amount. The amount he wrote on the cheque was
- A £2130
  - B £6420
  - C £6390
  - D £8445

### Questions 21 - 23 refer to the lengths of rivers

The river Rhine has a length of 1359 km while that of the river Elbe is 1152 km.

- 21** How much longer than the Elbe is the Rhine ?
- A 107 km
  - B 207 km
  - C 2511 km
  - D (not given)
- 22** The river Seine is two-thirds of the length of the river Elbe, so the length of the Seine is
- A 768 km
  - B 384 km
  - C 1728 km
  - D (not given)
- 23** The length of the river Nile is 6638 km. What is this length correct to the nearest 10 km ?
- A 664 km
  - B 6600 km
  - C 6630 km
  - D (not given)

### Questions 21 - 24 concern the Roberts' shopping trip.

- 24** Mrs Roberts takes her three children by bus to town. They leave home at 9.13 and, after travelling by bus, arrive at the town bus-stop at 10.07. How many minutes has the whole journey from home taken ?
- A 76
  - B 94
  - C 54
  - D (Not given)
- 25** Mrs Roberts' bus fare is 86p and each child goes for half the adult fare. How much does Mrs Roberts have to pay for all four of them?
- A £1.72
  - B £2.05
  - C £2.15
  - D (Not given)



# Sample Papers

## Mathematics Test Paper 1 (continued)

- 26** At a snack bar, Mrs Roberts buys a 70p ice-cream for each child and a cup of coffee costing 85p for herself. How much change should she receive from £5 ?
- A £2.05
  - B £3.05
  - C £2.75
  - D (Not given)
- 27** In one of the stores they visit, the children weigh themselves. Mrs. Roberts (a mathematics teacher), notices that the children's mean (average) weight is 32 kg, exactly half of her own weight. Andrew weighs 39 kg, Patsy weighs 27 kg. How much does Jenny weigh ?
- A 30 kg
  - B 34 kg
  - C 44 kg
  - D (Not given)

**Questions 28 - 30 are about Ramanuj's map reading.**

- 28** The scale of Ramanuj's map is 1 cm to 500 metres. He finds the distance on the map for the first part of his journey is 3 cm. The actual distance this represents is
- A 15 km
  - B 1.5 km
  - C 150 metres
  - D (not given)
- 29** The second part of his journey is 3.4 km. The corresponding distance on the map would be
- A 1.7 cm
  - B 68 cm
  - C 3.4 cm
  - D (not given)
- 30** Ramanuj's whole journey comes to 12 km. His mother wants to know how many miles this is. Ramanuj divides the distance by 8 and multiplies the result by 5. His answer should be
- A 20 miles
  - B  $5\frac{1}{2}$  miles
  - C  $7\frac{1}{2}$  miles
  - D (not given)

**Question 31 - 35 are about the cost of theatre tickets.**

At a certain theatre, the charge made for a seat is shown in the table:

- 31** Mr and Mrs Patel and their two young children sat in the circle. How much did it cost them ?
- A £42.50
  - B £36.25
  - C £43.50
  - D (not given)





# Sample Papers

## Mathematics Test Paper 1 (continued)

- 32** What is the cost for two adults and a child in the rear stalls ?
- A £26.25
  - B £25.25
  - C £31.50
  - D (not given)
- 33** Mr and Mrs Wilkinson and their children paid a total of £43.75 for seats in the front stalls. How many children were there ?
- A 2
  - B 3
  - C 4
  - D (not given)

Seating Area	Charge per seat
Front Stalls	£12.50
Rear Stalls	£10.50
Circle	£14.50
Gallery	£12.00

*(Children half price)*

- 34** A group of 5 old age pensioners wanted seats in the gallery. They were each allowed 25% off the price. The total amount they had to pay was
- A £15
  - B £9
  - C £57
  - D (not given)
- 35** One day, a school party of 16 children went to this theatre and had seats in the gallery. Their teachers went free of charge! The teachers paid for the children with five £20 notes. The amount of change they received was
- A £4
  - B £14
  - C £16
  - D (not given)

**END OF MATHEMATICS TEST PAPER 1**

**LANCASTER GIRLS' GRAMMAR SCHOOL**

**MATHEMATICS**

**SPECIMEN TEST 2**

35 minutes

Write your name using BLOCK CAPITALS in the box below:

Read this before you start,

There are thirty five Mathematical questions for you to read through.  
There are four responses, **A,B,C** and **D** given for each question, but only one of these answers is correct. Choose the answer that you think is better than the others and make a **firm** pencil mark – **ACROSS** the appropriate letter on the answer sheet.

If you wish to change an answer be sure to **rub out** the pencil mark completely before marking another letter.

You are provided with an HB pencil, a rubber and an answer sheet.

**DO ANY WORKING ON THE QUESTION PAPER IF REQUIRED**

**DO NOT START UNTIL YOU ARE TOLD**



# Sample Papers

## Mathematics Test Paper 2

1  $378 + 49$  is equal to

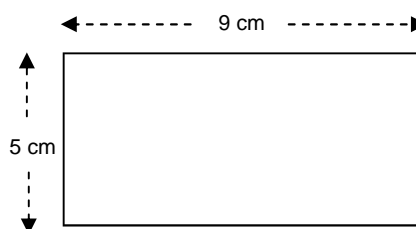
- A 327
- B 417
- C 427
- D 329

2 What number is represented by N if  $31 - N = 16$  ?

- A 47
- B 25
- C 15
- D 17

3 The area of this rectangle

- A 54 square cm.
- B 28 square cm.
- C 45 square cm.
- D 14 square cm.



4 The fraction  $\frac{31}{9}$  when changed to a mixed number is

- A  $3 \frac{4}{9}$
- B  $4 \frac{1}{9}$
- C  $\frac{4}{9}$
- D  $3 \frac{1}{9}$

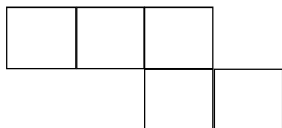
5 The square of 8 minus the square of 6 comes to

- A 4
- B 48
- C 36
- D 28

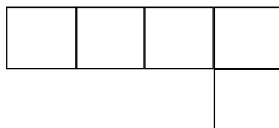
6 Miss Hughes knows that her train should leave the station at 2:35 in the afternoon. The station clock shows 13:50. The number of minutes until her train departs is

- A 15
- B 45
- C 11:15
- D 145

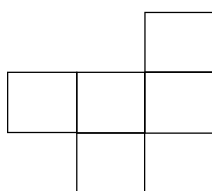
7 One of the following nets is NOT the net of a cube open at the top. The net is



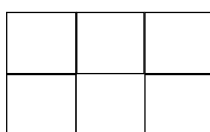
A



B



C



D



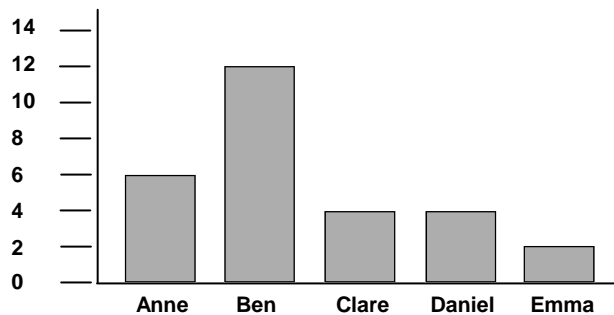
# Sample Papers

## Mathematics Test Paper 2 (continued)

- 8 Counting on in this sequence, the sixth and seventh numbers would be 25, 18, 11, 4, ...

A 3, 10  
B -3, -10  
C -10, -17  
D 11, 18

- 9 The bar chart shows how many lengths five children swam during a swimming lesson.



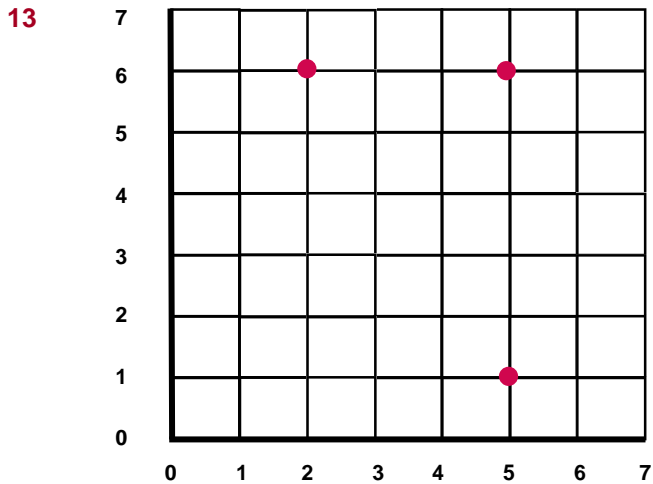
Which of the following statements about this chart is true ?

- A Ben swam more than the total of the others put together  
B The three girls together swam further than Ben  
C Ben swam more than twice as far as Clare  
D The total number of lengths they all swam was 26.
- 10 One side of an isosceles triangle is 9 cm. Another side is 16 cm. The perimeter of the triangle could be
- A 43 cm  
B 36 cm  
C 41 cm  
D 32 cm
- 11 The smallest number which is a multiple of 6 and also a multiple of 8 must be
- A 48  
B 36  
C 24  
D 56
- 12 Which of the following statements is not true ?
- A The sum of two odd numbers is even  
B The product of two odd numbers is odd  
C The product of an even number and an odd number is odd  
D The sum of an even number and an odd number is odd



# Sample Papers

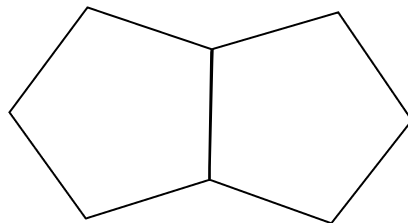
## Mathematics Test Paper 2 (continued)



The three points marked are the corners of a rectangle.

The co-ordinates of the fourth corner must be

- A (1, 2)  
B (2, 5)  
C (2, 1)  
D (6, 2)
- 14 A mountain is 945 metres high. Correct to the nearest 10 metres, this height is  
A 900 m  
B 950 m  
C 940 m  
D 1000 m
- 15 In a bag, there are red sweets and green sweets.  
There are 2 red sweets for every 3 green sweets.  
If there are 24 green sweets in the bag, the number of sweets altogether in the bag is  
A 16  
B 40  
C 36  
D 72
- 16 The figure consists of two identical regular pentagons attached together.  
The perimeter of the figure is 10 cm.  
The length of one of the edges is



- A 2 cm  
B 1 cm  
C 1.25 cm  
D 1.5 cm

# Sample Papers

## Mathematics Test Paper 2 (continued)

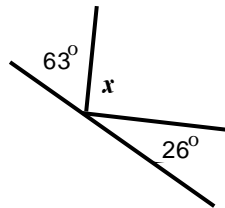
- 17 In the “grid” method of multiplying 67 by 86, not all the entries are showing. The number that should appear in the space marked with ? is

X	60	7	
80	4800		?
6	360	42	402

- A 4870  
B 560  
C 4800  
D 5360
- 18 75% of £236 is  
A £59  
B £177  
C £2.36  
D £174
- 19 Children at a party were asked to leave their shoes near the door before entering a room. The shoe sizes were: 5, 5, 7, 8, 5, 3, 4, 7, 6, 6, 4, 5, 3, 5, 6. The mode of these sizes is  
A 3  
B 5  
C 6  
D 7

- 20 The angle marked X in the diagram is

- A  $90^\circ$   
B  $91^\circ$   
C  $89^\circ$   
D  $99^\circ$







# Sample Papers

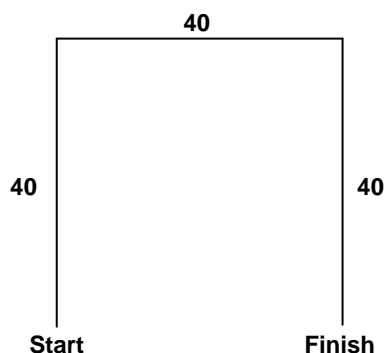
## Mathematics Test Paper 2 (continued)

Questions 21, 22 and 23 are about instructions to a computer.

21 Three instructions are available for controlling a robot on the computer screen.

go forward, turn right, turn left.

*For example:* go forward 40, turn right 90, go forward 40, turn right 90, go forward 40 would make the robot follow this path:



Jenny wanted her robot to follow a path which was an equilateral triangle.

Her instructions were: go forward 40, turn right N, go forward 40, turn right N, go forward 40. The number N should be

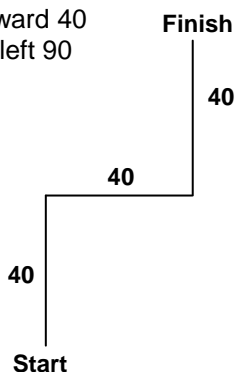
- A 60
- B 120
- C 90
- D 180

22 Sam's robot is following a square. Which of the following instructions must be repeated four times to complete the square of side 40.

- A go forward 90, turn right 40
- B go forward 40, turn right 180
- C go forward 90, turn right 90
- D go forward 40, turn right 90

23 To make the robot follow this path, the last two instructions must have been:

- A turn left 90, go forward 40
- B turn right 90, go forward 40
- C turn left 270, go forward 40
- D go forward 40, turn left 90





# Sample Papers

## Mathematics Test Paper 2 (continued)

Questions 24 -30 are about the Williams family's day trip on a chilly day in the winter holidays.

- 24** Mrs Williams set off with her two children for the station to catch the 9:43 a.m. train. They arrived at the station at 9:24. The train was late, however, and came in at 10:18. The number of minutes the Williams's had to wait was
- A 54
  - B 42
  - C 35
  - D 114
- 25** They eventually arrived at their destination where Mrs Williams bought both children an ice cream each. She paid with a £1 coin and a 50p piece, getting 14p change. The cost of one ice cream must have been
- A 78p
  - B 68p
  - C 73p
  - D 36p
- 26** They arrived at a castle. The admission charges were £4.50 for an adult and £2.25 for a child. The family in front of the Williams's in the ticket queue bought 2 adult and 3 children's tickets. The change they received from a £20 note was
- A £5.25
  - B £4.75
  - C £4.25
  - D £8.75
- 27** A thermometer in the main hall of the castle showed a temperature of  $11^{\circ}\text{C}$ . A thermometer in the dungeons that the Williams's visited later showed  $-2^{\circ}\text{C}$ . Mrs. Williams shuddered at the cold. How many degrees lower was the dungeons temperature than that in the hall?
- A  $9^{\circ}$
  - B  $11^{\circ}$
  - C  $-13^{\circ}$
  - D  $13^{\circ}$
- 28** The castle was built in 1348. Some parts had been added later in 1747. How many years later was this?
- A 401
  - B 399
  - C 499
  - D 301
- 29** In one of the rooms, two swords were displayed on the wall. One was 1.32 metres long. The other was 18 cm shorter so its length was
- A 1.5 m
  - B 1.24 m
  - C 1.14 m
  - D 1.1 m



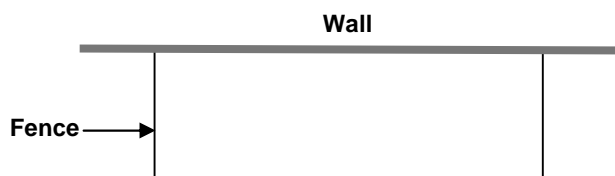
# Sample Papers

## Mathematics Test Paper 2 (continued)

- 30** Later in the day, the family went on a forest trail which was  $2\frac{1}{2}$  km long. After going for 40% of this distance, Mrs Williams was glad there was a seat for a rest. What further distance was there to the end of the trail?
- A 1 km
  - B  $1\frac{1}{2}$  km
  - C  $1\frac{2}{3}$  km
  - D 2 km

Questions 31 – 35 are about a dairy farm.

- 31** The farmer has 49 cows in the herd. The total number of litres of milk produced by the herd one day was 1990. The number of litres of milk produced by each cow that day must have been about
- A 4
  - B 400
  - C 40
  - D 50
- 32** A litre is about  $1\frac{3}{4}$  pints. A partly filled milk churn had 16 litres in it. This is about
- A 28 pints
  - B 12 pints
  - C 26 pints
  - D 20 pints
- 33** One of the fields on the farm is rectangular in shape and measures  $\frac{1}{2}$  km by 400 m. A hectare is an area of 10 000 square metres. The area of the field, in hectares, is
- A 2
  - B 20
  - C 200
  - D 2000
- 34** The farmer needs to make a rectangular enclosure against a wall.



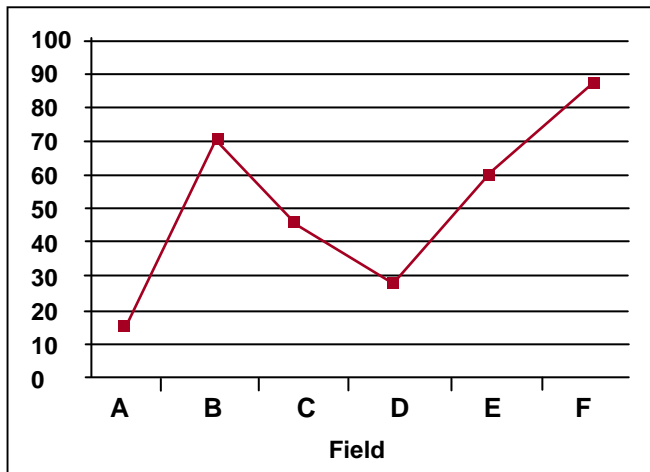
- He uses fencing for three sides of the rectangle as shown above. He uses 25 m of fencing for this. The area enclosed by the rectangle is 78 square metres. The length of the rectangle must be
- A 19 m
  - B 17 m
  - C 15 m
  - D 13 m



# Sample Papers

## Mathematics Test Paper 2 (continued)

- 35 On a nearby sheep farm, the farmer's daughter counted the number of sheep in each of the six fields. She then drew a graph showing her results.



Her father was not too impressed, however, because

- A the graph should be a curve, not line segments
- B the graph should be steeper when there are more sheep
- C the points should not be joined together
- D his daughter should have joined the point zero to the first plotted point.

**END OF TEST MATHEMATICS PAPER 2**



# Sample Papers

## Test Paper Answers

### Mathematics Test Paper 1

- 1 A
- 2 C
- 3 C
- 4 D
- 5 C
- 6 B
- 7 C
- 8 B
- 9 A
- 10 C
- 11 D
- 12 C
- 13 A
- 14 C
- 15 C
- 16 D
- 17 C
- 18 B
- 19 A
- 20 C
- 21 B
- 22 A
- 23 D
- 24 C
- 25 C
- 26 A
- 27 A
- 28 B
- 29 D
- 30 C
- 31 C
- 32 A
- 33 B
- 34 D
- 35 A

### Mathematics Test Paper 2

- 1 C
- 2 C
- 3 C
- 4 A
- 5 D
- 6 B
- 7 D
- 8 C
- 9 C
- 10 C
- 11 C
- 12 C
- 13 C
- 14 B
- 15 B
- 16 C
- 17 D
- 18 B
- 19 B
- 20 B
- 21 B
- 22 D
- 23 A
- 24 A
- 25 B
- 26 C
- 27 D
- 28 B
- 29 C
- 30 B
- 31 C
- 32 A
- 33 B
- 34 D
- 35 C