
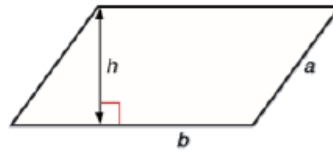


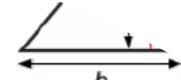
Rectangle area = $l \times w$

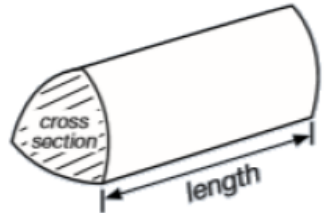


Parallelogram area = $b \times h$



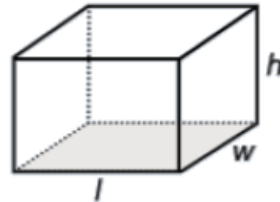
Triangle area = $\frac{b \times h}{2}$





Prism volume = area of cross section \times length

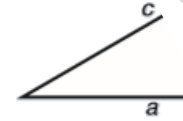
Cuboid volume = $l \times w \times h$



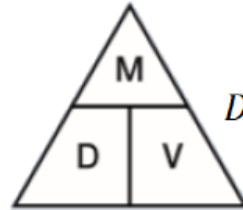
Cylinder volume = $\pi r^2 h$

Pythagoras

$a^2 + b^2 = c^2$



Speed = $\frac{\text{distance}}{\text{time}}$



Density = $\frac{\text{mass}}{\text{volume}}$



Pressure = $\frac{\text{force}}{\text{area}}$

n is the number of sides

Interior Angles = $(n - 2) \times 180$

REGULAR polygon = $\frac{360}{n}$

Constructing Pie Charts

Angle = $\frac{\text{frequency}}{\text{total}} \times 360$

Love

GCSE
Mathematics
at The Friary

About the Maths Exam



Exam Board

Edexcel



Tiers

Higher (Grade 4-9) Foundation
(Grade 1-5)



3 Papers

1 Non-calculator

2 Calculator

Each 1.5hrs long

Pearson Edexcel
Level 1/Level 2 GCSE (9-1)
Mathematics
Paper 1 (Non-Calculator)
Foundation Tier
Thursday 24 May 2018 – Morning
Time: 1 hour 30 minutes
Paper Reference: 1MA1/1F
Total Marks

Instructions

- Use **black** ink or ball-point pen.
- Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – there may be more space than you need.
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- Calculators may not be used.**

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets – use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Pearson Edexcel
Level 1/Level 2 GCSE (9-1)
Mathematics
Paper 2 (Calculator)
Foundation Tier
Thursday 7 June 2018 – Morning
Time: 1 hour 30 minutes
Paper Reference: 1MA1/2F
Total Marks

Instructions

- Use **black** ink or ball-point pen.
- Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – there may be more space than you need.
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- Calculators may be used.**
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets – use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Pearson Edexcel
Level 1/Level 2 GCSE (9-1)
Mathematics
Paper 3 (Calculator)
Foundation Tier
Tuesday 12 June 2018 – Morning
Time: 1 hour 30 minutes
Paper Reference: 1MA1/3F
Total Marks

Instructions

- Use **black** ink or ball-point pen.
- Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – there may be more space than you need.
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- Calculators may be used.**
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets – use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Exam Papers in Focus: Higher

Write 124 as a product of its prime factors.

Work out the value of $\frac{\left(5\frac{4}{9}\right)^{-\frac{1}{2}} \times \left(4\frac{2}{3}\right)}{2^{-3}}$

You must show all your working.

Cormac has some sweets in a bag.
The sweets are lime flavoured or strawberry flavoured or orange flavoured.

In the bag

number of lime : number of strawberry : number of orange
flavoured sweets : flavoured sweets : flavoured sweets = 9 : 4 : x

Cormac is going to take at random a sweet from the bag.

The probability that he takes a lime flavoured sweet is $\frac{3}{7}$

Work out the value of x.

A delivery company has a total of 160 cars and vans.

the number of cars : the number of vans = 3 : 7

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{8}$ of the cars use electricity.

25% of the cars use diesel.

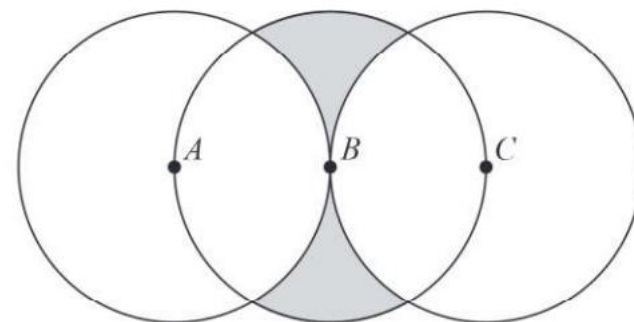
The rest of the cars use petrol.

Work out the number of cars that use petrol.

You must show all your working.

The diagram shows three circles, each of radius 4 cm.

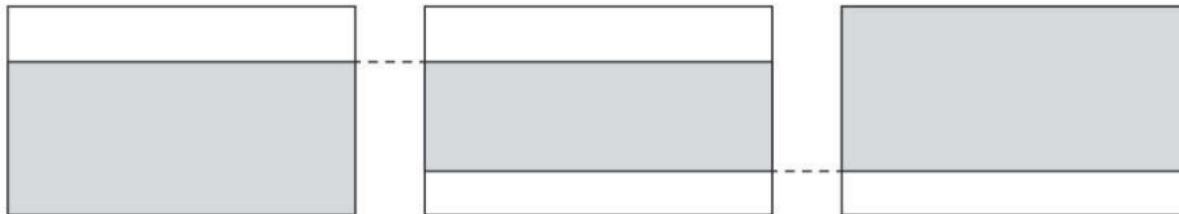
The centres of the circles are A , B and C such that ABC is a straight line and $AB = BC = 4$ cm.



Work out the total area of the two shaded regions.
Give your answer in terms of π

Exam Papers in Focus: Foundation

The diagram shows three identical rectangles **A**, **B** and **C**.



Rectangle **A**

Rectangle **B**

Rectangle **C**

$\frac{5}{8}$ of rectangle **A** is shaded.

$\frac{9}{11}$ of rectangle **C** is shaded.

Work out the fraction of rectangle **B** that is shaded.

A delivery company has a total of 160 cars and vans.

the number of cars : the number of vans = 3 : 7

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{8}$ of the cars use electricity.

25% of the cars use diesel.

The rest of the cars use petrol.

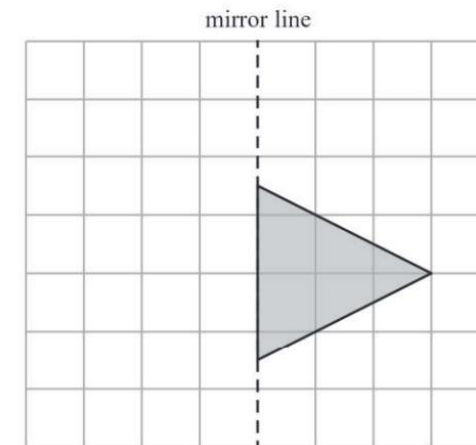
Work out the number of cars that use petrol.

You must show all your working.

Change 40 centimetres into millimetres.

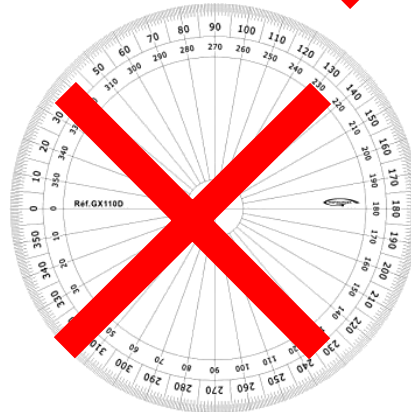
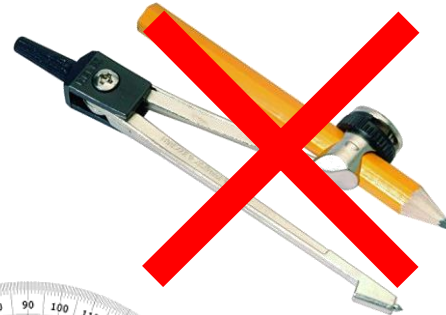
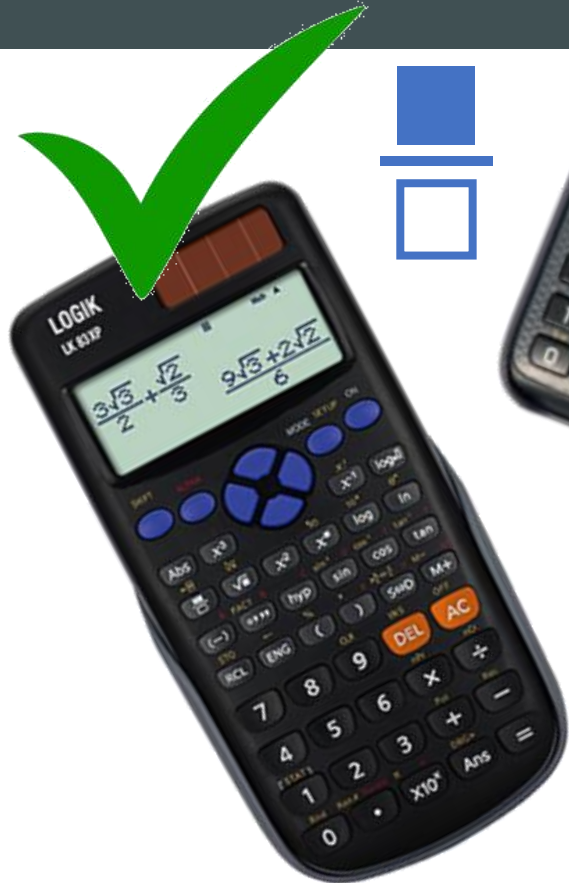
Simplify $e + e + e + e$

On the grid, reflect the shaded triangle in the mirror line.



(Total for Question 3 is 1 mark)

Equipment



Calculator

+

All other standard
equipment for lessons
(pen, pencil, ruler etc)

Students DO NOT need a
pair of compasses, or a
protractor as we lend
those out when we need
them

Assessments

- 1 end of half term assessment
 - 2-3 learning checks throughout each half term
 - Focus is current topic with some previous content addressed
- Revision homework set and checked for completion
 - Revision in class
 - Focus on exam technique
 - Specific after school booster sessions

Y10 Mocks- June. This will assess both pupils' calculator and non-calculator skills. This will be the first time that Year 10 pupils will complete two full papers in the sports hall. This is in preparation for the Y11 November mocks, where pupils will sit a full set of 3 GCSE papers.

What can students do to improve their Maths?

Websites

<https://www.dr frostmaths.com/>

<https://www.mathsgenie.co.uk/>

<https://corbettmaths.com/>

Revision Workbooks

Resources on these websites include

- Video tutorials
- Exam questions
- Textbook questions
- Full solutions
- Revision pages
- Games

PRACTICE MAKES PERMANENT

