

Write your name here	
Surname	Other names
<b>Pearson Edexcel</b>	Centre Number
Level 1/Level 2 GCSE (9-1)	Candidate Number
<h1 style="margin: 0;">Mathematics</h1> <h2 style="margin: 0;">Paper 3 (Calculator)</h2> <h3 style="margin: 0;">Aiming for 4</h3> <h3 style="margin: 0; float: right;">Foundation Tier</h3>	
Spring 2022 Practice Paper	Paper Reference
Time: 1 hour 30 minutes	<b>1MA1/3F</b>
<b>You must have:</b> Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.	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  $\pi$  button, take the value of  $\pi$  to be 3.142 unless the question instructs otherwise.



### Information

- The total mark for this paper is 40. There are 16 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the November examinations
- 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.

**Answer ALL SIXTEEN questions.**

**Write your answers in the spaces provided.**

**You must write down all the stages in your working.**

**1** What is the time 2 hours 40 minutes after 8.05 a.m.?

..... a.m.

**(Total for Question 1 is 1 mark)**

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**2** Karim buys 200 tiles.

The tiles are sold in boxes.

There are 25 tiles in each box.

Each box of tiles costs £9.75

Work out the total cost of the boxes of tiles Karim buys.

£ .....

**(Total for Question 2 is 3 marks)**

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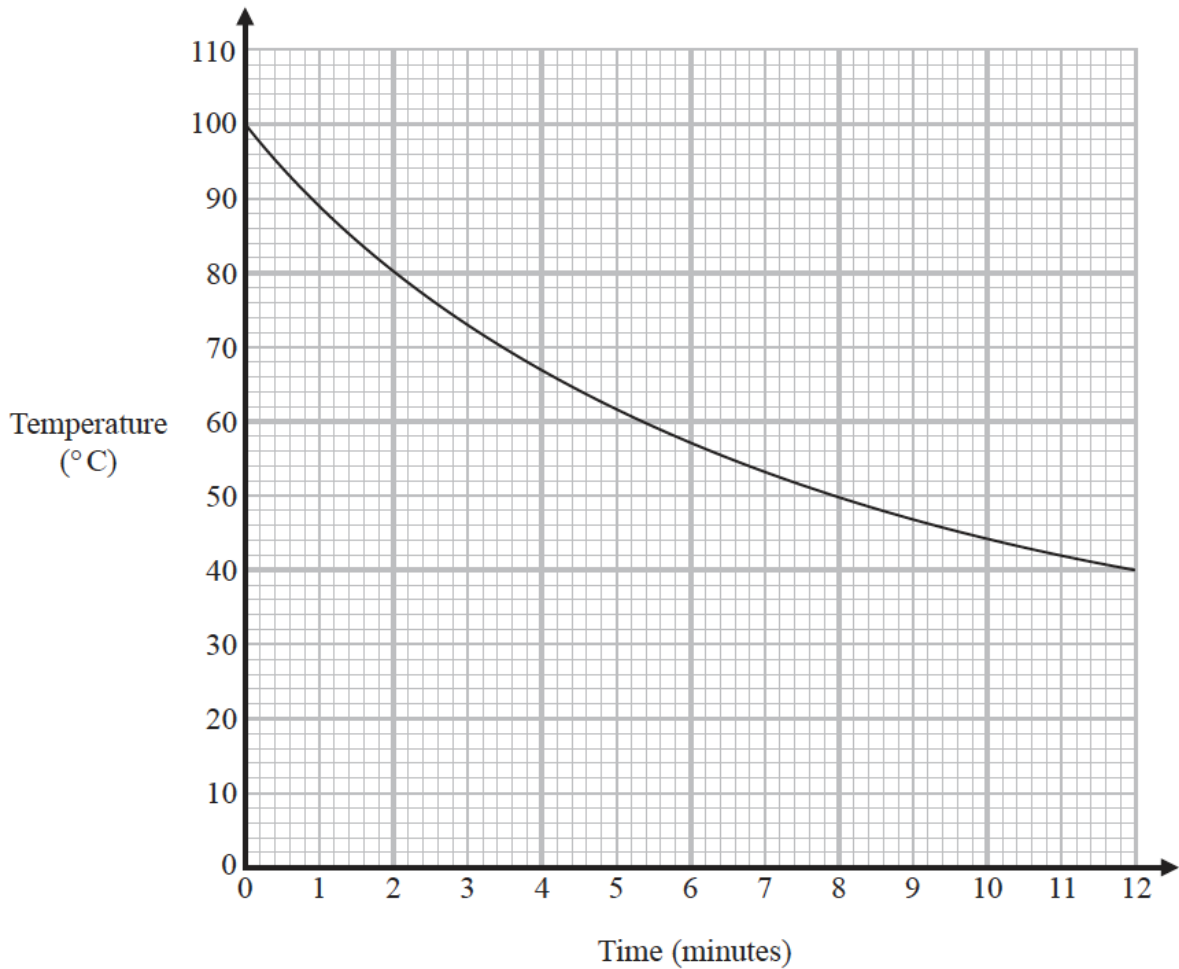
**3** Write 45% as a decimal.

.....

**(Total for Question 3 is 1 mark)**

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- 4 The graph shows information about the time, in minutes, a liquid has been cooling and the temperature of the liquid in °C.



- (a) What is the temperature of the liquid at time 2 minutes?

..... °C  
**(1)**

Pam recorded the time when the liquid had a temperature of 50° C.

- (b) Write down this time.

..... minutes  
**(1)**

Pam says that the temperature of the liquid drops more in the first 3 minutes of cooling than it does between time 9 minutes and time 12 minutes.

(c) Is Pam correct?

Give a reason for your answer.

.....  
.....  
.....

(1)

(Total for Question 4 is 3 marks)

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5 Work out  $2.5^2$

.....

(Total for Question 5 is 1 mark)

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6 Vadim has 56 clocks.  
The clocks are only red, only blue or only black.

32 of the clocks are plastic.  
5 of the 14 blue clocks are plastic.  
8 of the 12 red clocks are **not** plastic.

Use this information to complete the two-way table.

	Red	Blue	Black	Total
Plastic				
Not plastic				
Total				

(Total for Question 6 is 3 marks)

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7 Work out  $\frac{1}{3}$  of 24

.....  
**(Total for Question 7 is 1 mark)**

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8 (a) Simplify  $3x + 5y + 2x - 4y$

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

(b) Solve  $5p + 7 = 22$

$p =$  .....  
**(2)**

**(Total for Question 8 is 4 marks)**

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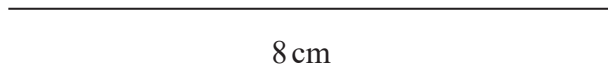
9 Corina has £300 to spend on books.  
Each book costs £4.85

Work out the greatest number of books Corina can buy.

.....  
**(Total for Question 9 is 3 marks)**

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- 10** Draw accurately an isosceles triangle with sides of length 8 cm, 6 cm and 6 cm. One side of the triangle has been drawn for you.



**(Total for Question 10 is 2 marks)**

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11 Malik is going to throw a fair coin 50 times.

(a) Write down an estimate for the number of times the coin will land on heads.

.....  
(1)

Paula and Simon are trying to find out if a different coin is biased.

Paula throws this coin 10 times.

She records the number of times the coin lands on heads.

Simon throws the same coin 100 times.

He records the number of times the coin lands on heads.

(b) Whose results will be more useful in deciding if the coin is biased?  
Give a reason for your answer.

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

(Total for Question 11 is 2 marks)

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12 (a) Simplify  $a \times b \times 4$

.....  
(1)

(b) Simplify  $4x + 3 - x + 5$

.....  
(2)

(Total for Question 12 is 3 marks)

13 (a) Write 196 minutes in hours and minutes.

..... hours ..... minutes  
(2)

A train travels  $x$  miles in 2 hours.

(b) Write down an expression, in terms of  $x$ , for the average speed of the train.

..... miles per hour  
(1)

**(Total for Question 13 is 3 marks)**

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14 (a) Work out the value of  $\frac{300}{2 \times 5}$

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

(b) Work out the value of  $(6 - 2.5)(8 + 4)$

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

(c) Write down the reciprocal of 20

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

**(Total for Question 14 is 3 marks)**

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- 15 A stadium cost £600 million.  
 $\frac{13}{15}$  of this cost was for the building.  
The rest of the cost was for the land.

Work out the cost of the land.

£..... million

**(Total for Question 15 is 3 marks)**

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- 16 Akhtar, Ben and Carl each have some money.  
Akhtar has £65  
Ben has £100  
Carl has three £5 notes, one £20 note and some £10 notes.  
The mean amount of money per person is £80  
How many £10 notes does Carl have?

.....  
**(Total for Question 16 is 4 marks)**

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**TOTAL FOR PAPER IS 40 MARKS**