

Write your name here

Surname <i>mel@justmaths.co.uk</i>	Other names
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Pearson Edexcel Centre Number

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 Candidate Number

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Level 1/Level 2 GCSE (9-1)

Mathematics *Worked Solutions*
(there may be other methods to those shown!)
Paper 3 (Calculator)
 Achieving a Grade 1 **Foundation Tier**

Spring 2023 Practice Paper 31 marks 30 minutes	Paper Reference 1MA1/3F
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You must have: 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 π button, take the value of π to be 3.142 unless the question instructs otherwise.



Information

- The total mark for this paper is 30. There are 23 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by students achieving Grade 1 in the Summer and November 2022 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 TWENTY THREE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 Here are the first five terms of a number sequence.

3 8 13 18 23
+5 +5 +5 +5

Write down the next two terms of this sequence.

$$23 + 5 = 28$$
$$28 + 5 = 33$$

28 33

(Total for Question 1 is 1 mark)

- 2 Four students play a game.
The table shows the number of points each student has.

Student	Ali	Barbara	Calliope	Danesh
Number of points	143	121	45	19

121 19
Barbara has more points than Danesh.
How many more?

$$121 - 19 = 102$$

102

(Total for Question 2 is 1 mark)

- 3 Here is a list of numbers.

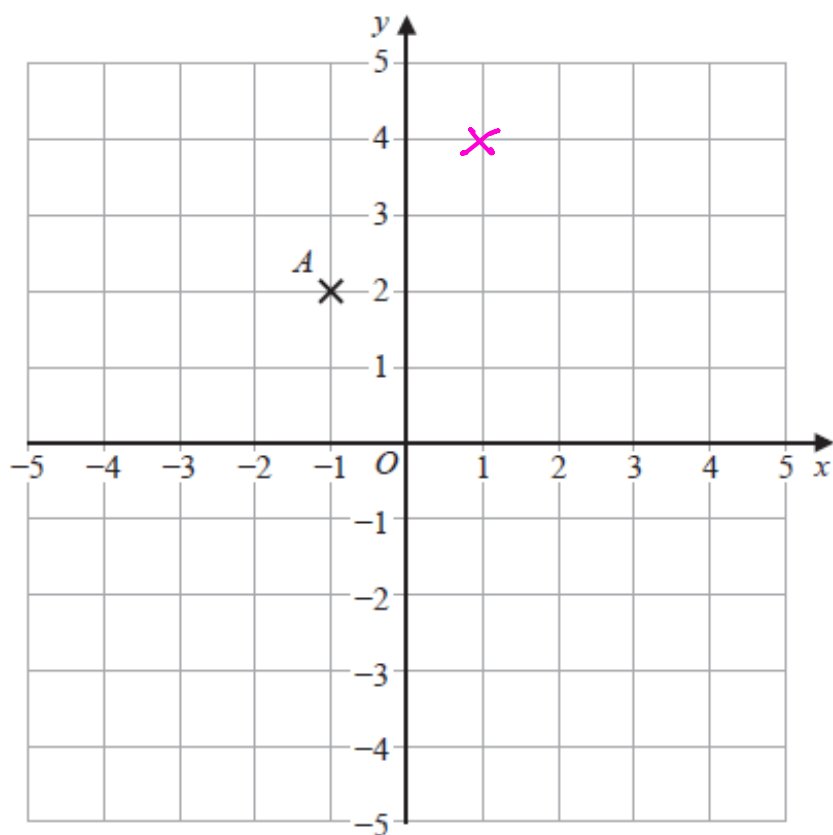
5 11 18 22 29

From the list, write down a multiple of 3

3 6 9 12 15 18 21
x x x x x ✓ x

18

(Total for Question 3 is 1 mark)



(a) Write down the coordinates of point A.

(..... - 1 , 2)
(1)

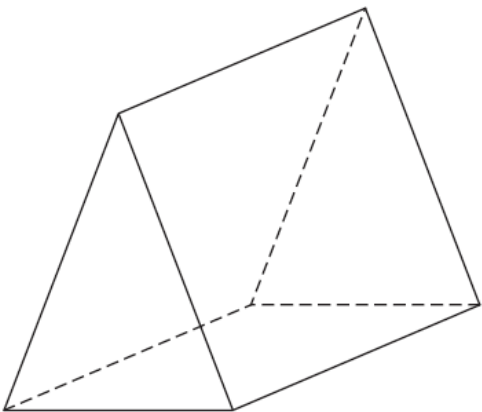
(b) On the grid, mark with a cross (×) the point (1, 4)
Label this point B.

(1)

(Total for Question 4 is 2 marks)

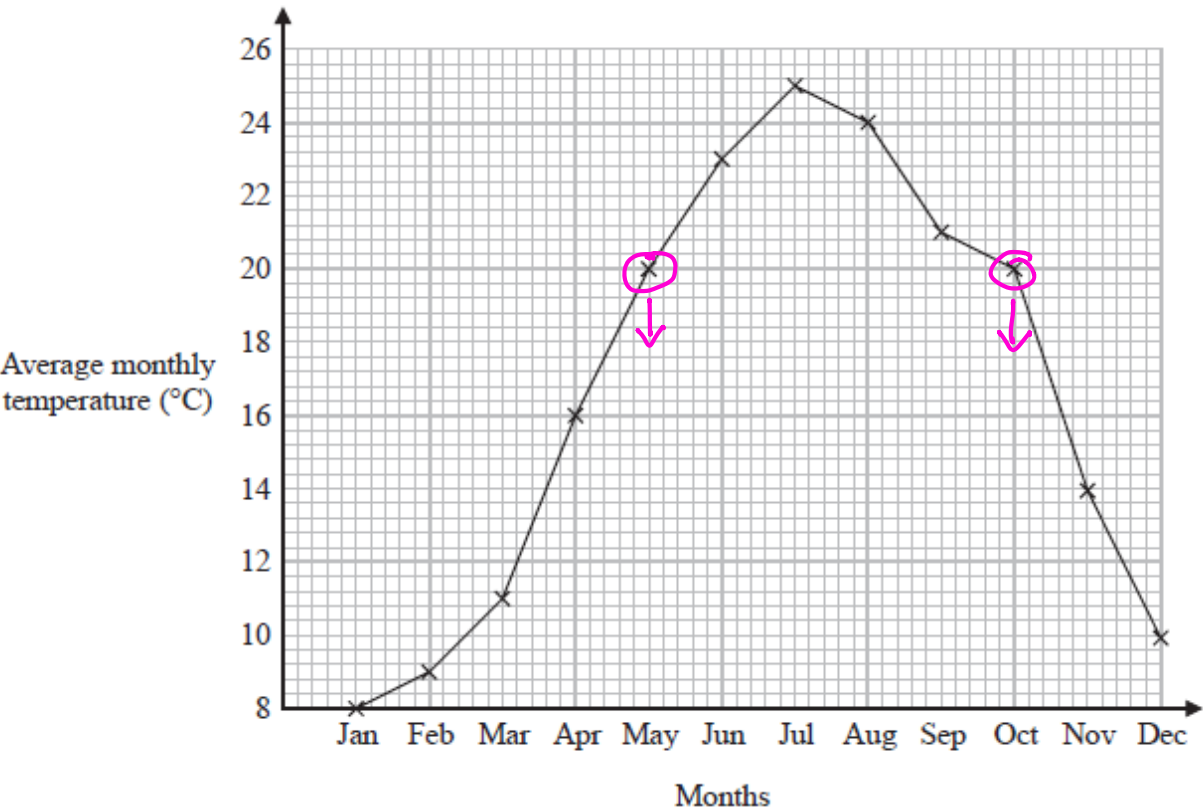
5 The diagram shows a solid triangular prism.

Write down the number of faces of the prism.



..... 5
(Total for Question 5 is 1 mark)

6 The graph shows information about the average monthly temperature, in °C, in Amman.



Write down the two months that had the same average monthly temperature.

..... *May* and *October*

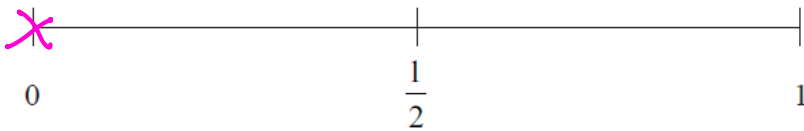
(Total for Question 6 is 1 mark)

7 Here is a list of 8 numbers.

2 2 3 5 6 6 8 9

Kim picks at random one of these numbers.

On the probability scale below, mark with a cross (×) the probability that Kim picks the number 7 *(There are no 7's)*



(Total for Question 7 is 1 mark)

8 Write down two factors of 12

any two from 1, 12
2, 6
3, 4
~~4, 3~~

for example

..... 1 12

(Total for Question 8 is 1 mark)

9 Find $\sqrt{1.69}$

use your calculator

..... 1.3

(Total for Question 9 is 1 mark)

10 Write down the value of the 2 in the number 12 345

..... 2000

(Total for Question 10 is 1 mark)

11 The table shows the total number of apples sold and the total number of oranges sold in a shop in each of three weeks.

	Week 1	Week 2	Week 3
Number of apples	86	75	92
Number of oranges	68	80	76

In total for the three weeks, more apples than oranges were sold.

How many more?

Apples = $86 + 75 + 92 = 253$

Oranges = $68 + 80 + 76 = 224$

Difference = $253 - 224$

..... 29

(Total for Question 11 is 3 marks)

12 Work out $\frac{(3.2 + 3.7) \times 4.9}{5.3 - 2.8}$

Give your answer as a decimal.

$$\begin{array}{r} 33.81 \\ \underline{2.5} \end{array}$$

..... 13.524

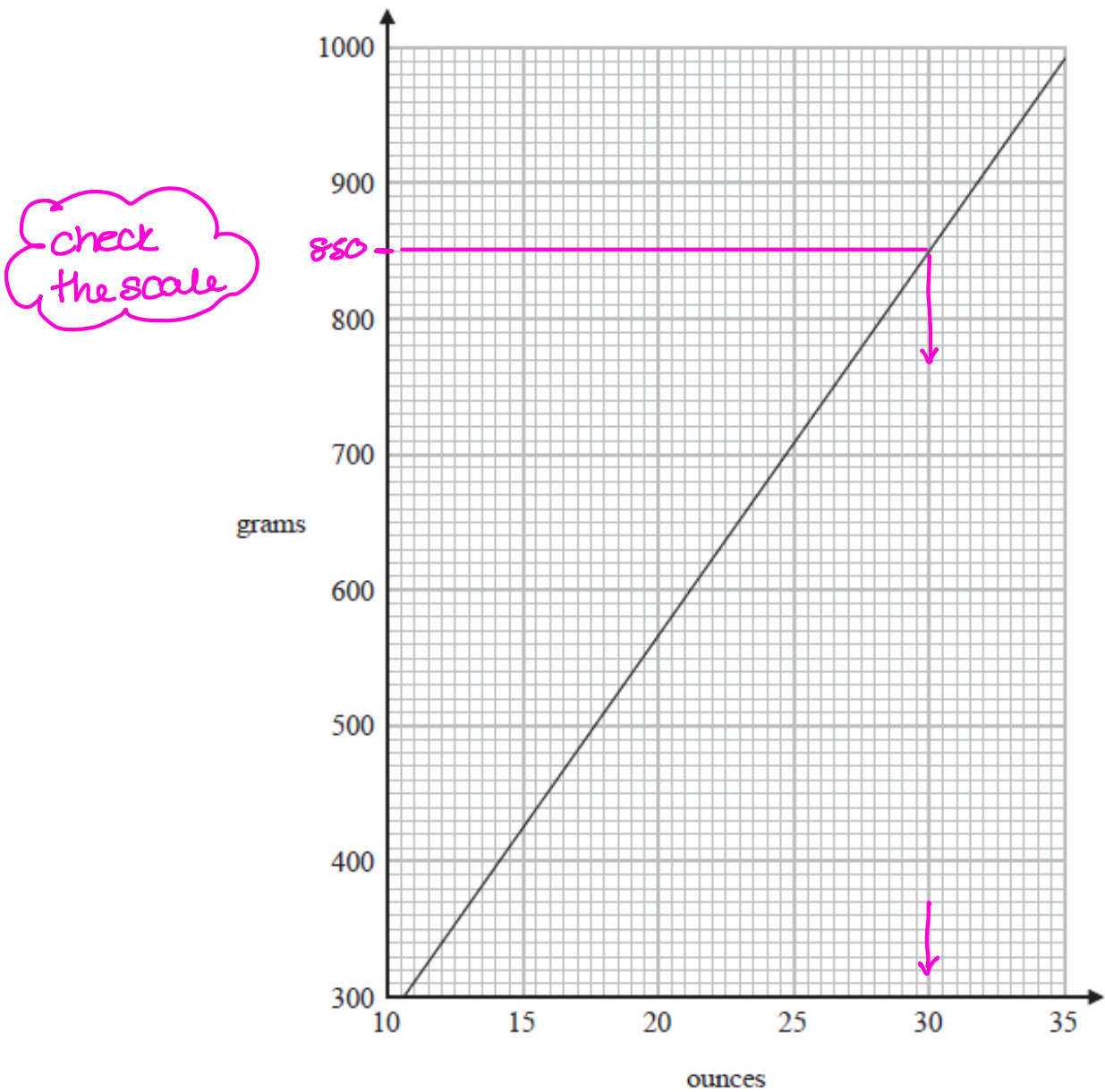
(Total for Question 12 is 2 marks)

13 Simplify $2m \times 3$

..... **6m**

(Total for Question 13 is 1 mark)

14 You can use this graph to change between ounces and grams.

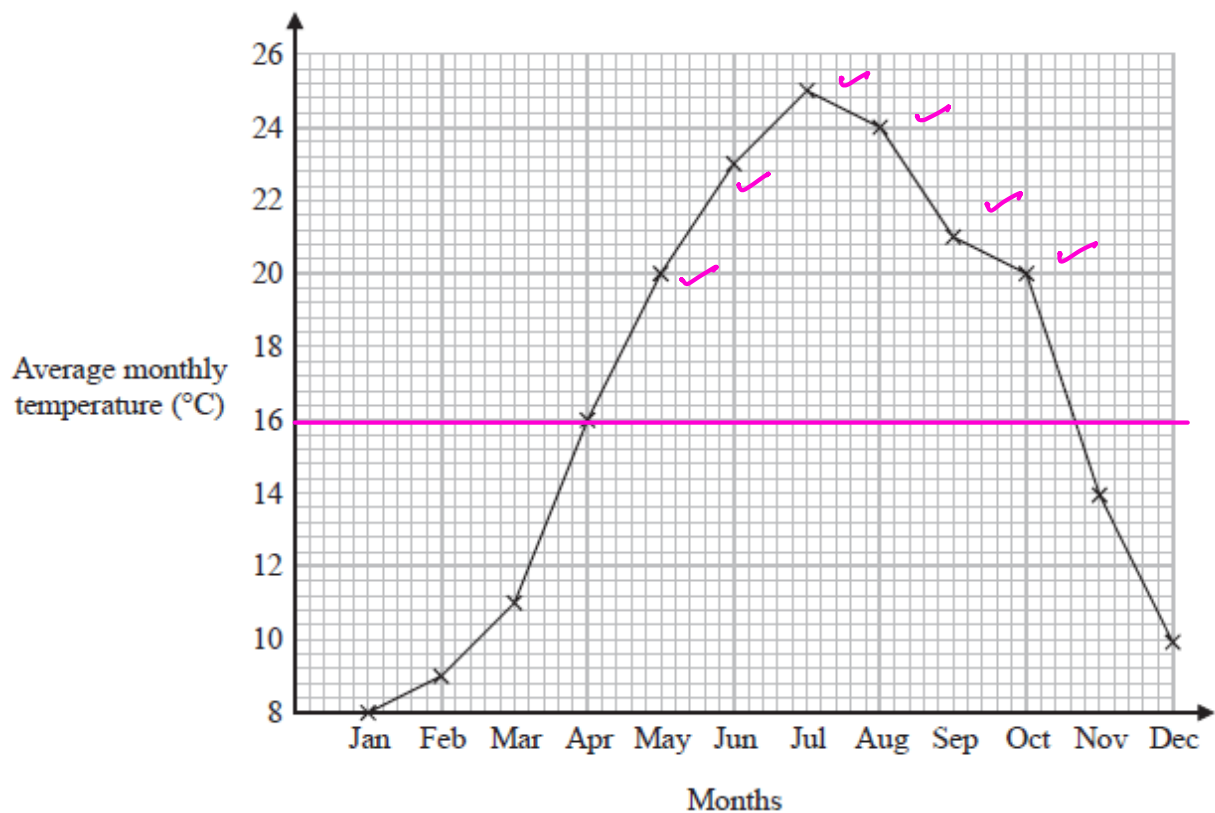


Change 850 grams to ounces.

..... **30** ounces

(Total for Question 14 is 1 mark)

15 The graph shows information about the average monthly temperature, in °C, in Amman.



For how many months was the average monthly temperature greater than 16°C?

6

(Total for Question 15 is 1 mark)

16 Sinita wants to make 35 picture frames.
She needs 4 nails for each frame.

Sinita has 3 boxes of nails.
There are 48 nails in each box.

Has Sinita got enough nails to make all 35 frames?
Show how you get your answer.

Needs: $35 \times 4 = 140$

Has: $48 \times 3 = 144$

Sinita has enough $144 > 140$

(Total for Question 16 is 3 marks)

- 17 Write $\frac{4}{5}$ as a decimal.

0.8

(Total for Question 17 is 1 mark)

- 18 Write 35% as a fraction.

$\frac{35}{100}$ (or equivalent)

(Total for Question 18 is 1 mark)

- 19 Here are the first three terms of a sequence.

20 16 13
- 4 - 3 - 2 11 - 1

Write down two numbers that could be the 4th and 5th terms of this sequence.

$$13 - 2 = 11$$

$$11 - 1 = 10$$

(or 9, 6)

11 10

(Total for Question 19 is 1 mark)

- 20 Work out $\frac{1}{4}$ of 28

$$28 \div 4 = 7$$

7

(Total for Question 20 is 1 mark)

- 21 Work out $\frac{2.75 \times 14.6}{10 - 1.97} = \frac{40.15}{8.03}$

5

(Total for Question 21 is 2 marks)

- 22 Here is the shoe size of each of 12 boys in a class.

~~4~~ ~~5~~ ~~6~~ ~~6~~ ~~6~~ 7 7 ~~8~~ ~~8~~ ~~8~~ ~~9~~

check they are in size order

Find the median.

7

(Total for Question 22 is 1 mark)

- 23 Four students play a game.
The table shows the number of points each student has.

Student	Ali	Barbara	Calliope	Danesh
Number of points	143	121	45	19

Work out the mean number of points.

Total = 143 + 121 + 45 + 19 = 328

Mean = 328 ÷ 4
= 82

.....82

(Total for Question 23 is 2 marks)

TOTAL FOR PAPER IS 31 MARKS