

Please check the examination details below before entering your candidate information

Candidate surname

Other names

**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

Set 8

Time: 25 minutes

Paper Reference **PMAT2/N08**

Mathematics

Level 2

Section A (Non-Calculator)



You must have:

Pen, HB pencil, eraser, ruler graduated in cm and mm, protractor, pair of compasses. Tracing paper may be used.

Total Marks

My signature confirms that I will not discuss the content of the test with anyone.

Signature: _____

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.
- Sign the declaration.
- Answer **all** questions.
- Write your final answers in the boxes provided.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- **Calculators may not be used.**
- Take the value of π to be 3.14

Information

- The total mark for this section is 16.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- This sign ☒ shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ►

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.CG Maths.
Worked Solutions


Pearson

Please note that these worked solutions have neither been provided nor approved by Pearson Education and may not necessarily constitute the only possible solutions. Please refer to the original mark schemes for full guidance.

Any writing in blue should be written in the exam.

Anything written in green in a rectangle doesn't have to be written in the exam.

If you find any mistakes or have any requests or suggestions, please send an email to curtis@cgmaths.co.uk

SECTION A

Answer ALL questions. Write your answers in the spaces provided.

- 1 Eve buys lunch on her way to work.
She sees this meal deal.

Meal deal

Buy any sandwich
snack and drink
for £3.99

Eve chooses these items.

Chicken sandwich	£2.85
Fruit snack pot	79p
Coffee	£1.59

Work out how much money Eve will save using the meal deal.
You **must** show your working.

(3)

$$\begin{array}{r} 2.85 \\ + 0.79 \\ + 1.59 \\ \hline 5.23 \\ \hline \end{array}$$

Adding the costs of buying the chicken sandwich, the fruit snack pot and the coffee without using the meal deal works out that it would cost £5.23. 79p is £0.79

$$\begin{array}{r} 5.23 - 4 \\ 1.23 + 0.01 \end{array}$$

Subtracting the £3.99 from the £5.23 to work out the difference and so how much is saved. This can be done by subtracting £4 then adding 1p

£ 1.24

(Total for Question 1 is 3 marks)

2

Work out $74.88 \div 1.2$ You **must** show your working.

(3)

$$\begin{array}{r} 0\ 6\ 2\ .\ 4 \\ 12 \overline{) 74\ 8\ 8} \end{array}$$

Multiplying both the 74.88 and 1.2 by ten to eliminate the decimal on what we are dividing by. Then doing short division

12, 24, 36, 48, 60, 72, 84

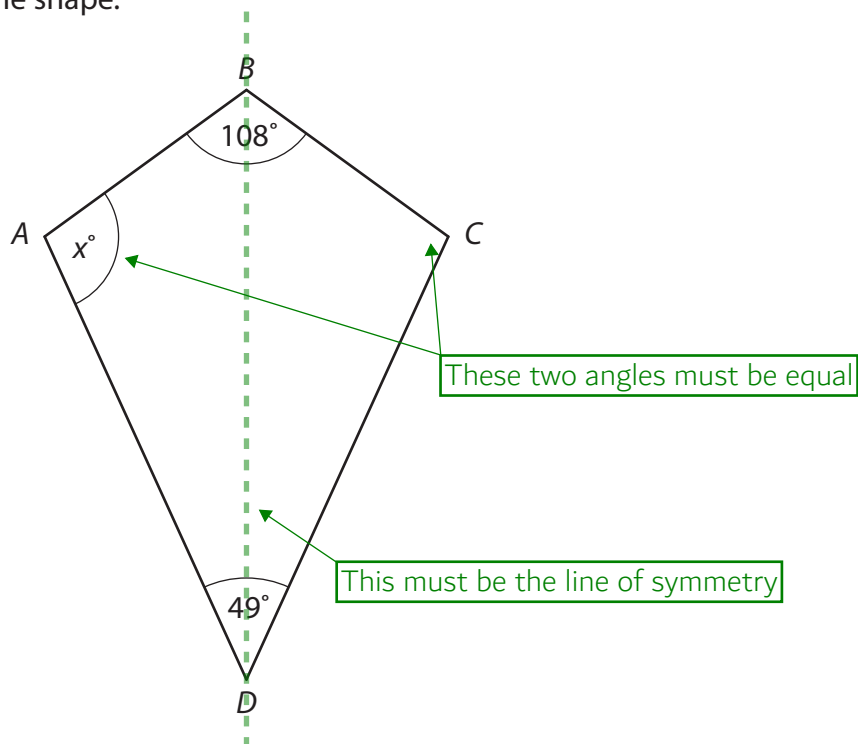
Listing out the 12 times table could help

$748.8 \div 12$ gives the same answer as $74.88 \div 1.2$

62.4

(Total for Question 2 is 3 marks)

- 3 $ABCD$ is a 4-sided shape.
 BD is a line of symmetry of the shape.



- (a) Work out the value of x .

(3)

$$\begin{array}{r}
 108 \\
 + 49 \\
 \hline
 157
 \end{array}$$

Adding the 108° and 49° works out that there are 157° so far in the shape

$$\begin{array}{r}
 360 \\
 - 157 \\
 \hline
 203
 \end{array}$$

There are 360° in total in a four-sided shape. So subtracting the 157° so far from 360° works out that there are 203° remaining in the shape

$$\begin{array}{r}
 101.5 \\
 2 \overline{) 203.0} \\
 \underline{200} \\
 30
 \end{array}$$

Dividing the remaining 203° by the 2 equal angles works out x

101.5



- (b) Use estimation to check your answer.

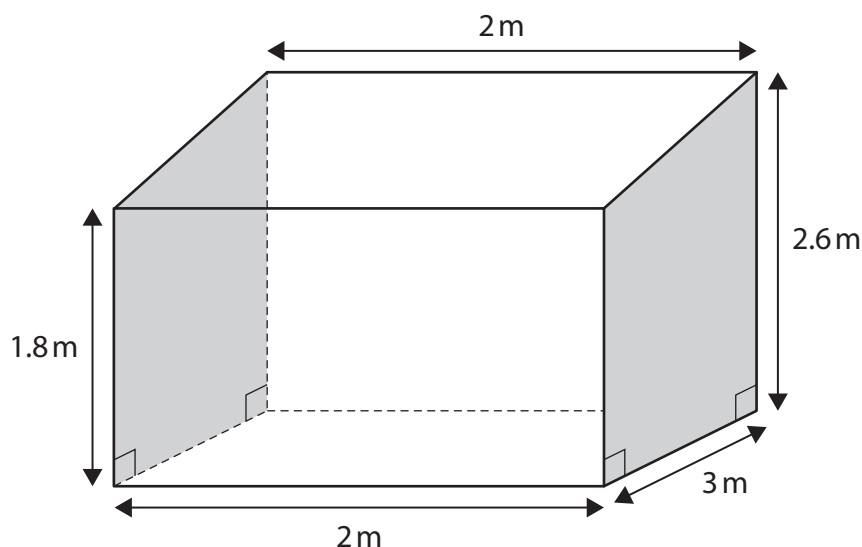
(1)

$$\begin{array}{l}
 110 + 50 \\
 360 - 160 \\
 200 \div 2 = 100
 \end{array}$$

Repeating the calculation with rounded numbers to make it easier gives an estimate which is close to 101.5

(Total for Question 3 is 4 marks)

- 4 Max is building a new shed.
He has drawn this sketch.



Each shaded wall of the shed is in the shape of a trapezium.
The other two walls are rectangular.

Max wants to cover the four walls with wood cladding.
He will not use any cladding for the floor or the roof.

Max will buy the cladding in packs.
Each pack of cladding covers 1.1 m^2

The cladding can be cut and joined.

Max knows that the two rectangular walls need 8.8 m^2 of cladding in total.

Work out how many packs of cladding Max needs to cover the four walls.

(6)

$$\begin{array}{r} 2.6 \\ + 1.8 \\ \hline 4.4 \\ \times 3 \\ \hline 13.2 \\ + 8.8 \\ \hline 22.0 \end{array}$$

$$\begin{array}{r} 0 \ 2 \ 0 \\ 11 \overline{) 22 \ 0} \end{array}$$

Area of a trapezium = $\frac{1}{2} (a + b)h$, where a and b are the parallel sides (the 1.8 m and 2.6 m) and h is the distance between them (the 3 m). First working out that the $(a + b)$ bit is 4.4

Then multiplying by h to get 13.2 . The $\frac{1}{2}$ means to divide by 2 , however we also need to multiply by 2 as there are 2 identical trapeziums. Dividing by 2 and multiplying by 2 are opposites so cancel each other out. So the area of both trapeziums is 13.2 m^2

Adding the 8.8 m^2 needed for the two rectangular walls works out that 22 m^2 of cladding is needed

Dividing the 22 m^2 by the 1.1 m^2 in each pack works out how many packs are needed. Multiplying both the 22 and 1.1 by ten to eliminate the decimal on what we are dividing by gives an equivalent division which is easier

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20

(Total for Question 4 is 6 marks)

TOTAL FOR SECTION A IS 16 MARKS