

Please check the examination details below before entering your candidate information

Candidate surname

Other names

**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

Set 9

Time: 1 hour 30 minutes

Paper Reference **PMAT1/C09**

Mathematics

Level 1

Section B (Calculator)



You must have:

Pen, calculator, 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 be used.**
- If your calculator does not have a π button take the value of π to be 3.14

Information

- The total mark for this section is 42.
- The total mark for this paper is 56.
- 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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SECTION B

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

- 1** Marlene competes in sprint races.
She wants to qualify to race in a team.

Here are the times, in seconds, of her last 4 races.

24.99 23.07 23.7 24.54

Marlene needs the mean time of her last 4 races to be less than 23.9 seconds to qualify.

Is the mean time of her last 4 races less than 23.9 seconds?

(3)

(Total for Question 1 is 3 marks)



- 2 Rio has a mobile car wash business.
He has a tank for water in his van.

The tank is in the shape of a cuboid 0.9 m wide and 0.9 m long.
When full, the water in the tank is 0.4 m deep.

Rio uses 45 litres of water to wash each car.

$1\text{ m}^3 = 1000$ litres

Rio thinks there is enough water in a full tank to wash 8 cars.

Is Rio correct?
Show why you think this.

(4)

(Total for Question 2 is 4 marks)

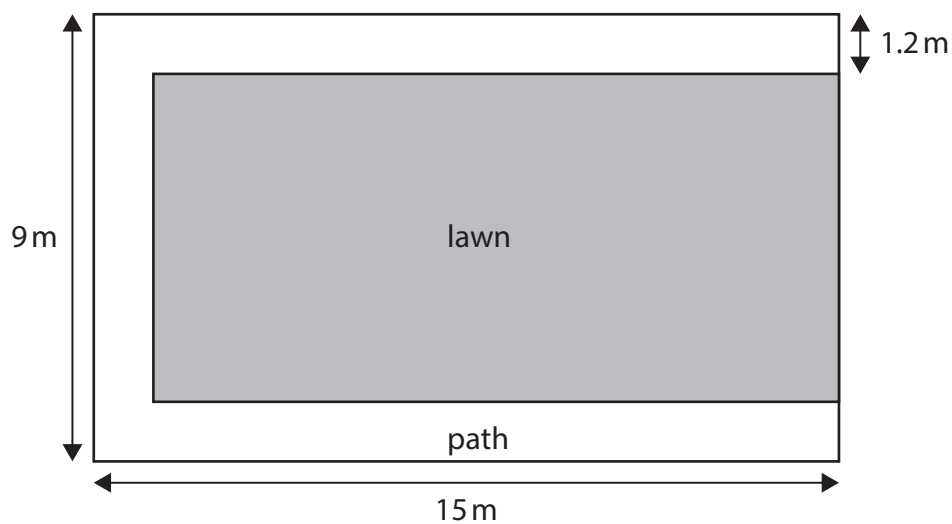


P 6 8 4 7 3 A 0 3 1 6

- 3 Ella is making a path around three sides of her lawn. The lawn is in the shape of a rectangle.

The width of the path will be 1.2 m

All corners on the path are right angles.



Ella will cover the path with gravel.

Gravel is sold in bags.

Each bag of gravel covers 3m^2

Work out the number of bags of gravel Ella needs to buy to cover the path.

(5)



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(Total for Question 3 is 5 marks)



P 6 8 4 7 3 A 0 5 1 6

- 4 Colin wants to buy a new television.
He sees this offer.

Television

Normal price £599

Now 35% off the normal price

Colin uses the offer.

Work out the price of the television using the offer.

(3)

£

(Total for Question 4 is 3 marks)

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5 Jessica wants to sell her house.

She has this information about the selling prices of houses in her street.

£199 000 £195 500 £225 550 £190 995 £229 000

Jessica thinks the range of these selling prices is more than £35 000

- (a) Is Jessica correct?
Show why you think this.

(2)



- (b) Show a check of your answer.

(1)

(Total for Question 5 is 3 marks)



P 6 8 4 7 3 A 0 7 1 6

6

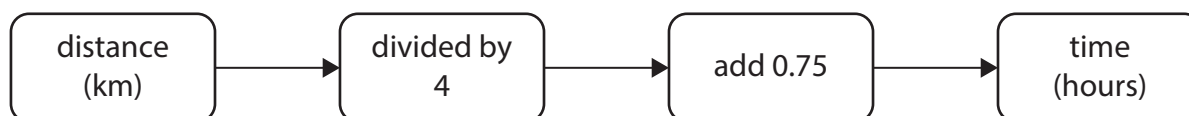
(a) Write 35% as a decimal.

(1)

Pete uses a map to plan a route for walking.
The route he will walk today is 14 cm on the map.

1 cm on the map represents 2.5 km on the route

Pete uses this rule to work out the time needed to walk the route.



(b) Work out the time needed to walk the route.
Give your answer in **hours** and **minutes**.

(5)



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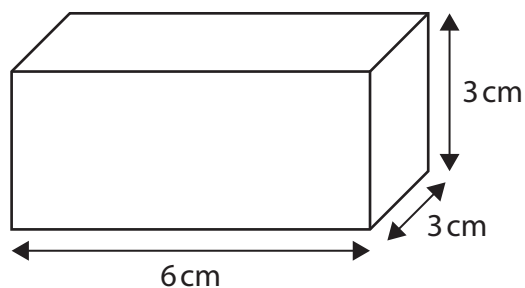
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hoursminutes

(Total for Question 6 is 6 marks)

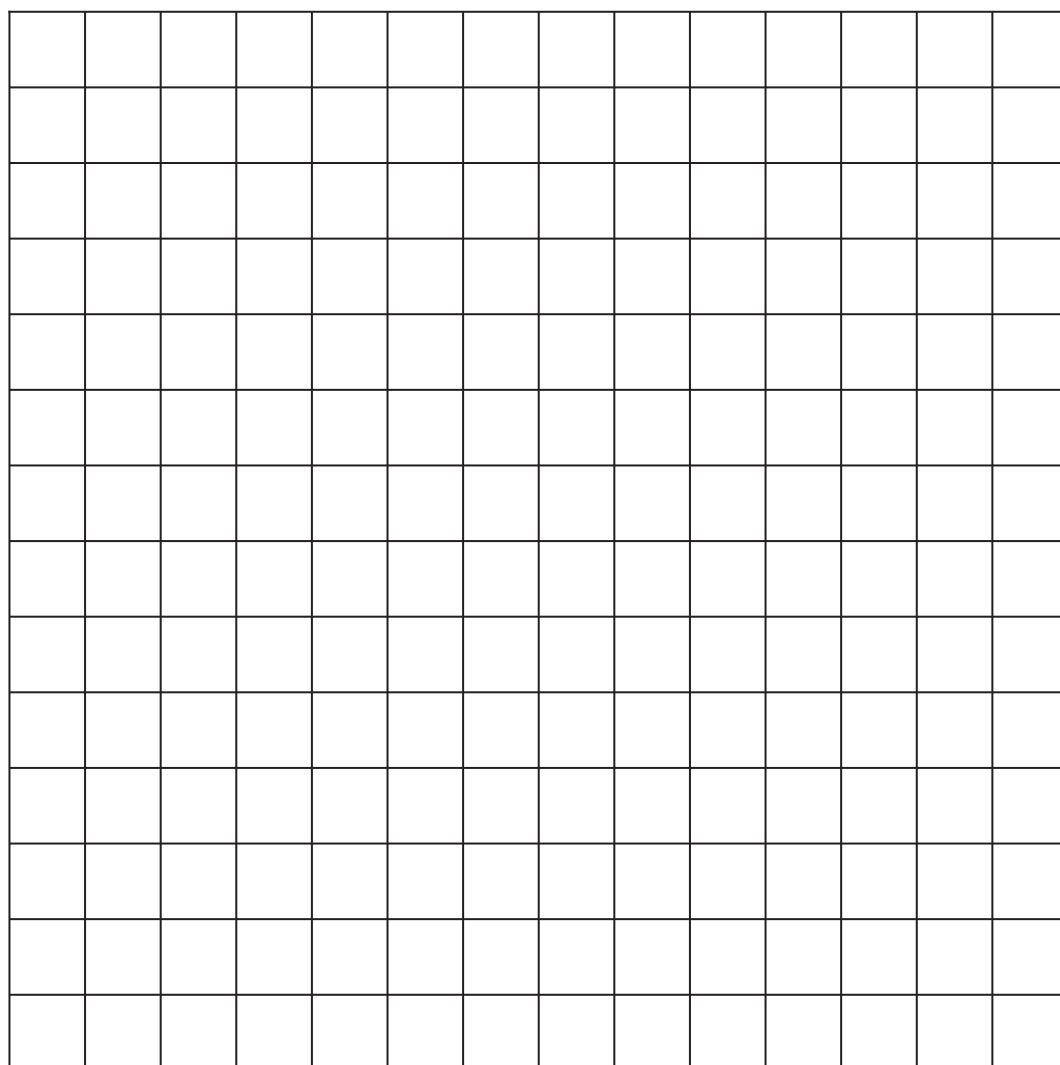


7 Here is a cuboid.



Draw a net of the cuboid.
Use the centimetre grid below to draw your net.

(3)



(Total for Question 7 is 3 marks)



8 Layla buys a box of doughnuts.
Each doughnut is filled with either jam or apple or chocolate.

In the box there are

- 7 jam doughnuts
- 15 apple doughnuts
- 18 chocolate doughnuts.

Layla opens the box and picks a doughnut at random.

(a) What is the probability that Layla picks a jam doughnut?

(2)

The probability that a person does not like doughnuts is $\frac{1}{10}$

(b) Which of these words describes this probability?

(1)

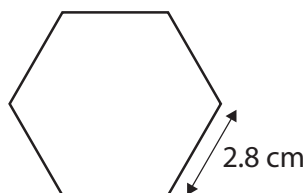
Tick [✓] a box to show your answer.

- ☐ impossible
- ☐ unlikely
- ☐ even
- ☐ likely
- ☐ certain

(Total for Question 8 is 3 marks)



9 Here is a regular hexagon.



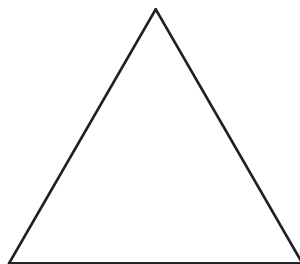
(a) Calculate the perimeter of this hexagon.

(2)

 cm

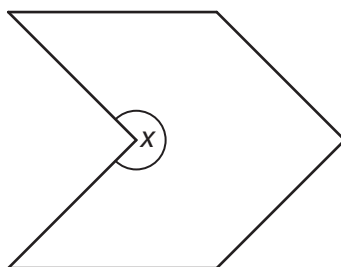
(b) Draw a line of symmetry on this equilateral triangle.

(1)



Here is a polygon.

One angle is labelled with the letter x .



(c) Select the word that describes the angle labelled with the letter x .

(1)

Tick ☒ a box to show your answer.

☐ acute ☐ obtuse ☐ reflex ☐ right ☐ opposite

(Total for Question 9 is 4 marks)



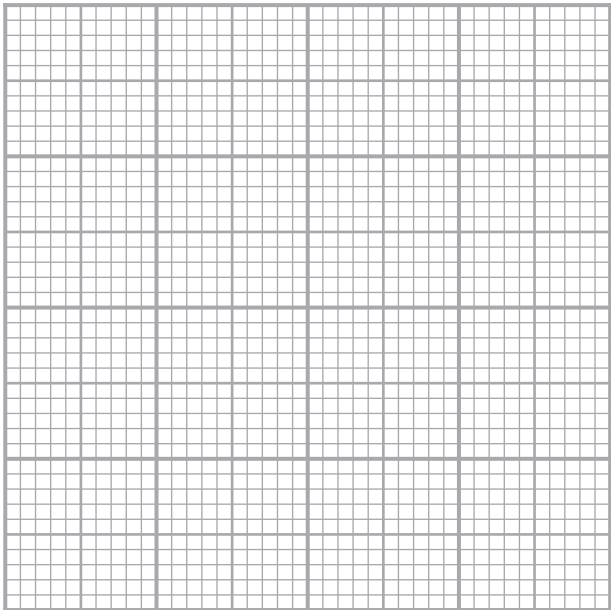
10 Marlon is doing a survey about exercise.
He asks 100 people how many times a week they exercise.
The results are shown in the table.

number of times	number of people
0 to 1	10
2 to 3	64
4 to 5	18
6 to 7	8

Marlon wants to show this information on a graph.

Draw a suitable graph for Marlon.

(3)



(Total for Question 10 is 3 marks)



P 6 8 4 7 3 A 0 1 3 1 6

- 11 Jon is tiling a swimming pool.
He needs to buy 120 boxes of tiles in total.

He buys boxes of blue tiles and boxes of white tiles in the ratio 1 : 4

Each box of blue tiles costs £23.99

Each box of white tiles costs £16.75

Work out the total cost of all the tiles Jon needs.
You **must** show your working.

(5)

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(Total for Question 11 is 5 marks)

TOTAL FOR SECTION B IS 42 MARKS
TOTAL FOR PAPER IS 56 MARKS



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