Candidate surname

Other names

**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

Set 7

Time: 1 hour 30 minutes

Paper Reference **PMAT1/C07**

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 ▶

Pearson

DO NOT WRITE IN THIS AREA

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SECTION B

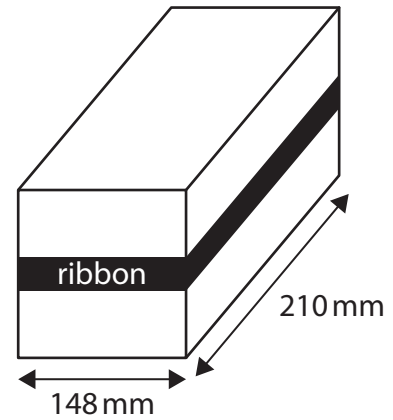### Answer ALL questions. Write your answers in the spaces provided.

1 Jenni has a decorative box business.

She has a box in the shape of a cuboid
210 mm long and 148 mm wide.

Jenni is going to glue one piece of ribbon around
all four side faces of the box.

The ribbon will not overlap.

Jenni thinks a 72 cm piece of ribbon will be long enough.

ribbon

210 mm

148 mm

Is Jenni correct?
Show why you think this.

(3)

(Total for Question 1 is 3 marks)

2 A bag contains 26 counters.

5 of the counters are green.
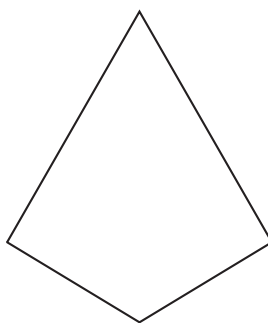The remainder of the counters are orange.

One counter is chosen at random.

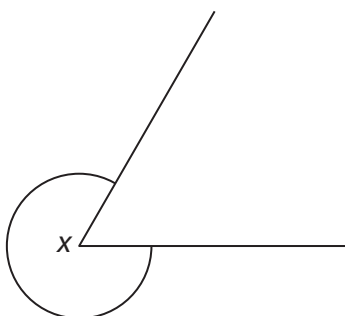(a) Work out the probability the counter is orange.

(2)

Here is a drawing of a kite.

(b) Draw the line of symmetry on the kite.

(1)

(c) Measure and write down the size of the reflex angle x.

(1)

°

(Total for Question 2 is 4 marks)

3

(a) Write three thousand two hundred and fifty seven in figures.

(1)

(b) Write the number 1024 in words.

(1)

Ella works in a post room.
She has these parcels to post.

Here are the exact weights of the parcels.

25 kg	13 kg	11 kg	11 kg	3000 g
12 kg	28 kg	2 kg	8 kg	1 kg
6000 g	22 kg	14 kg	25 kg	28 kg
10 kg	1 kg	16 kg	21 000 g	7 kg

Ella uses a frequency table to sort the parcels into 3 groups by weight to work out the cost of postage.

(c) Complete the frequency table for Ella.

(3)

weight (kg)	tally	frequency
0 to 2		
3 to 20		
21 to 30		

(Total for Question 3 is 5 marks)

4 A robot is programmed to move around a grid.
The direction of North is shown on the grid.

The robot can move forward and can turn.
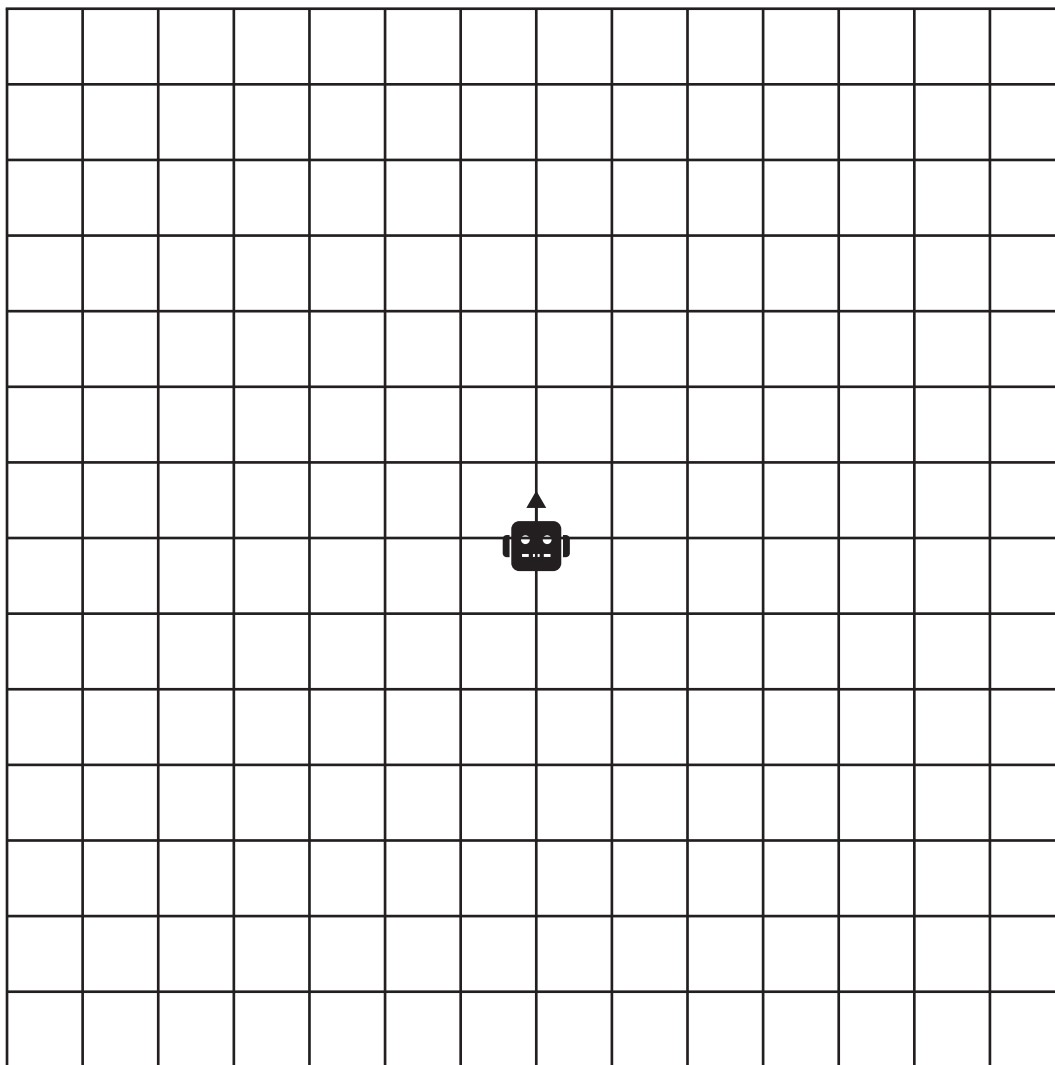The robot follows this set of instructions.

Start
1   move 50 cm forward to position *A*
2   turn on a bearing of 270^0
3   move 60 cm forward to position *B*
End

On the grid, mark with a cross (X) and label each of position *A* and position *B*.

(3)

N

↑

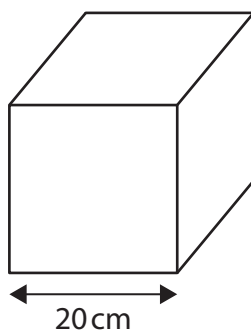**Key** 1 square length on the grid represents 10 cm

🤖 robot start position facing direction of arrow

(Total for Question 4 is 3 marks)

5 A cube has side length 20 cm.

20 cm

Calculate the volume of the cube.
State the units in your answer.

(3)

(Total for Question 5 is 3 marks)

Turn over ▶

6 Grace looks at her electricity bill for November.

Electricity bill

meter reading last time	20312 (kWh)
meter reading this time	22198 (kWh)
unit cost	5.4 pence per kWh used
standing charge	30 days at 16.74 pence per day
total bill for November	£105.84

Grace knows the meter readings are correct.

Is the total amount on the bill for November correct?
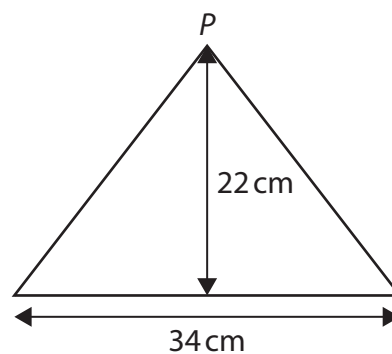You **must** show your working.

(6)

P 6 8 4 6 5 A 0 8 1 6

(Total for Question 6 is 6 marks)

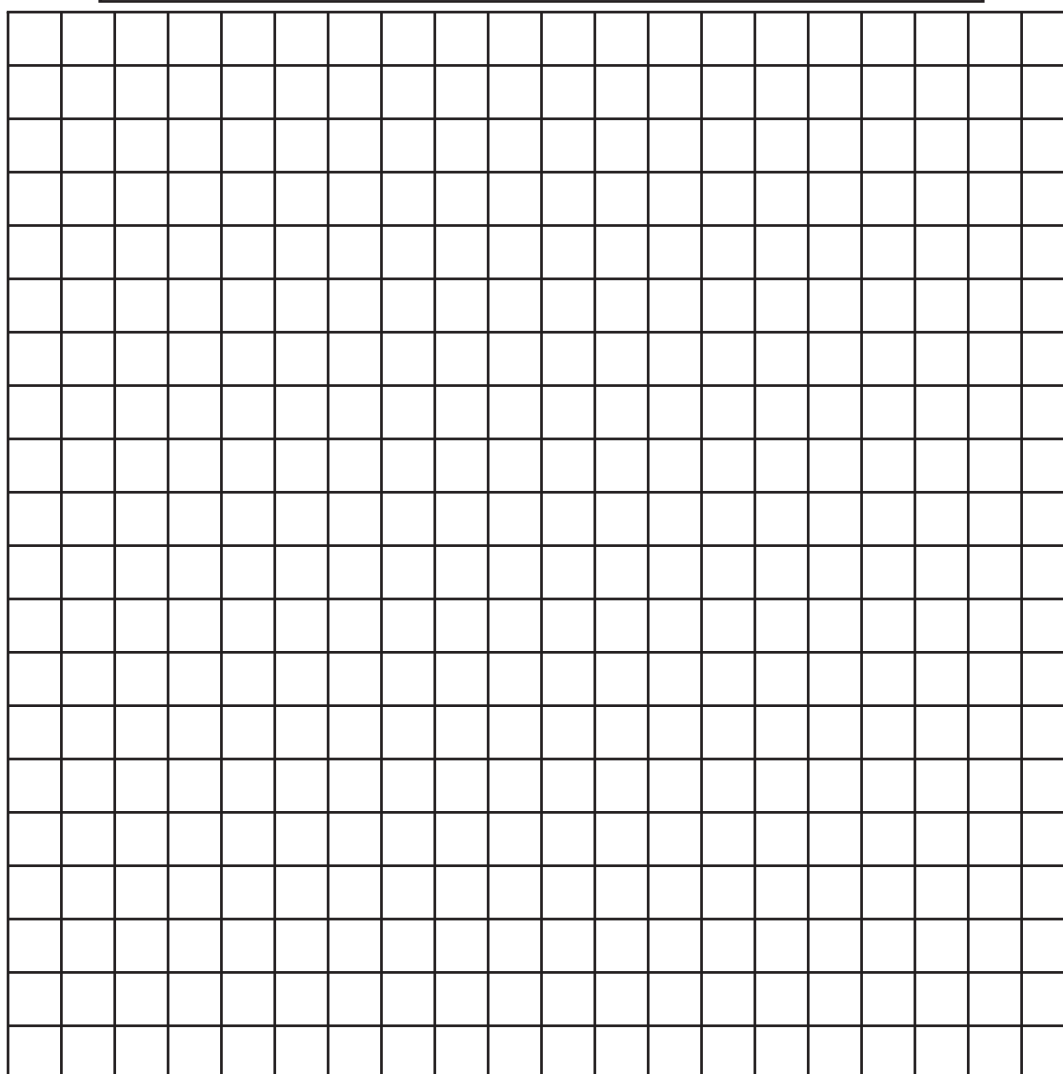**7** The diagram shows a triangle.

The triangle has base length 34 cm and height 22 cm.
Point *P* on the triangle is directly above the middle of the base.

P

22 cm

34 cm

Draw a scale diagram of the triangle on the grid below.

(3)

Key 1 square length on the grid represents 2 cm on the triangle

(Total for Question 7 is 3 marks)

8 Three groups of students are going on a school trip together on a coach.

Group A has 13 students.
Group B has 17 students.
Group C has 20 students.

There should be 1 adult for every 16 students on the coach.

Work out the least number of adults that are needed on the coach for this school trip.

(3)

(Total for Question 8 is 3 marks)

Turn over ▶

9 Yolanda buys a coat online.
The normal price of the coat is £205

Yolanda uses a 15% discount code.

(a) Work out the price of the coat after the discount.

(3)

£ _____

☑ (b) Show a check of your answer.

(1)

_____

(Total for Question 9 is 4 marks)

10 Abi has a pet rabbit that weighs 5 kg.
She buys packets of food for her rabbit.

Abi has this information about the number of packets of food rabbits need each day.

| weight of rabbit (kg) | ➡ | multiply by 2.2 | ➡ | divide by 2.75 | ➡ | number of packets per day |
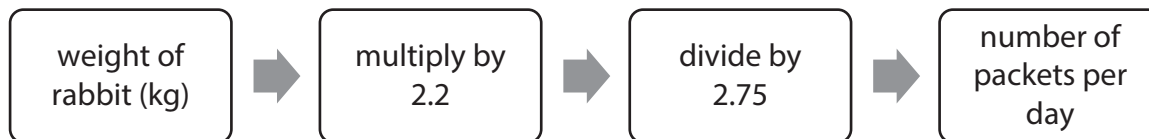
How many packets of food does her rabbit need each day?

(3)

(Total for Question 10 is 3 marks)

Turn over ▶

11 Edward is writing an article about a sponsored race for charity.

Edward knows

180 people are running in the race

$\frac{1}{4}$ of the people are running for pet charities

$\frac{2}{9}$ of the people are running for health charities.

The rest of the people are running for youth charities.
Edward wants to know the number of people running for youth charities.

Work out the number of people running for youth charities.

(5)

(Total for Question 11 is 5 marks)

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

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