

A



Surname \_\_\_\_\_

Forename(s) \_\_\_\_\_

Centre Number \_\_\_\_\_

Candidate Number \_\_\_\_\_

Candidate Signature \_\_\_\_\_

I declare this is my own work.

## Functional Skills Level 1

# MATHEMATICS

Paper 2 Calculator

**8361/2**

Thursday 3 November 2022

Afternoon

Time allowed: 1 hour 30 minutes

At the top of the page, write your surname and forename(s), your centre number, your candidate number and add your signature.

[Turn over]

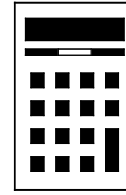


N 0 V 2 2 8 3 6 1 2 0 1

**MATERIALS**

For this paper you must have:

- a calculator
- mathematical instruments.

**INSTRUCTIONS**

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer ALL questions.
- You must answer the questions in the spaces provided. Do not write on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.



## **INFORMATION**

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

## **ADVICE**

**In all calculations, show clearly how you work out your answer.**

**DO NOT TURN OVER UNTIL TOLD TO DO SO**



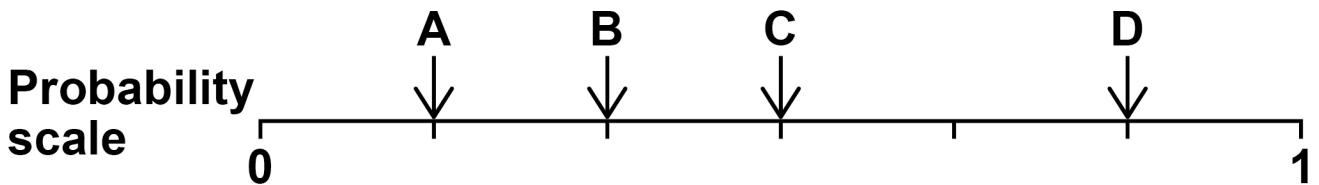
**SECTION A**

Answer ALL questions in the spaces provided.

- 1 A fair six-sided dice is rolled.

Which letter shows the probability of landing on an even number?

Circle your answer. [1 mark]



- 2 Circle the fraction with the same value as  $3\frac{3}{4}$   
[1 mark]

$$\frac{9}{4}$$

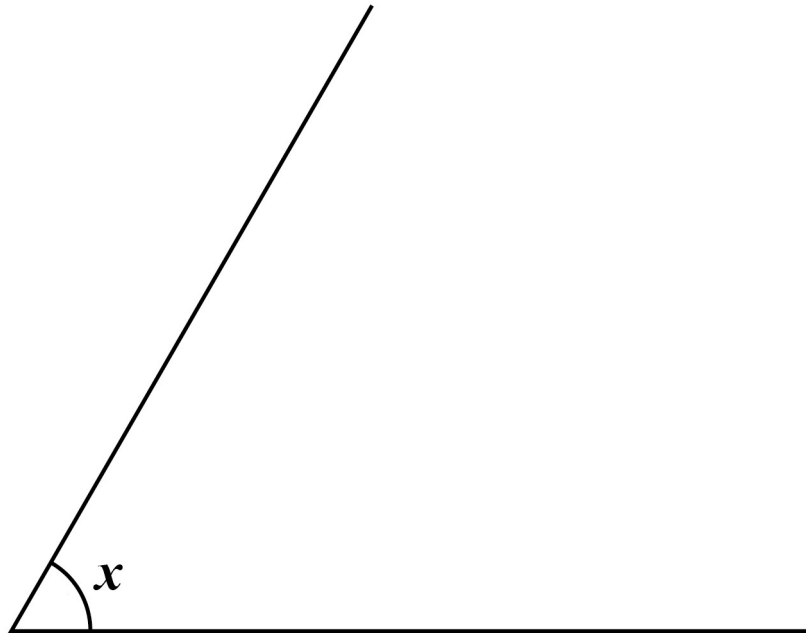
$$\frac{10}{4}$$

$$\frac{13}{4}$$

$$\frac{15}{4}$$



3 Measure the size of angle  $x$  [1 mark]



Answer \_\_\_\_\_ °

4 Calculate  $-5 \times -6$  [1 mark]

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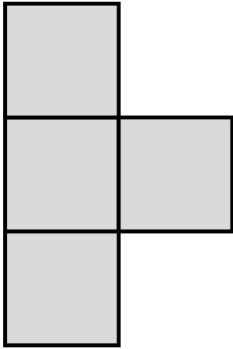
Answer \_\_\_\_\_

[Turn over]

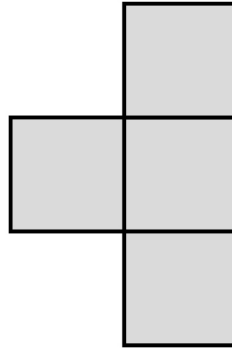


- 5 The front elevation and side elevation of a shape are shown.

**FRONT ELEVATION**



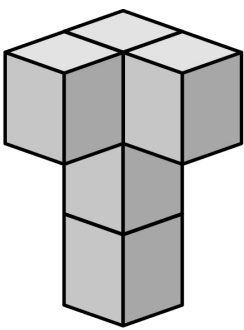
**SIDE ELEVATION**



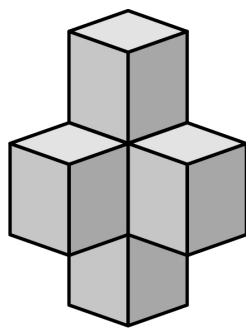
Which shape has these elevations?

Circle the correct letter. [1 mark]

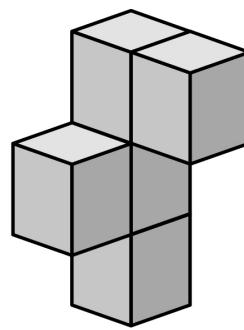
**A**



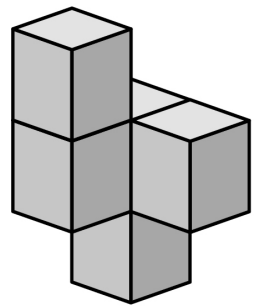
**B**



**C**



**D**



6 Round 14.76 to one decimal place. [1 mark]

Answer \_\_\_\_\_

7 Here are six numbers.

16      19      16      10      17      12

Work out the mean. [3 marks]

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Answer \_\_\_\_\_

[Turn over]



8 Increase 630 by 40% [3 marks]

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12





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**[Turn over]**



**SECTION B**

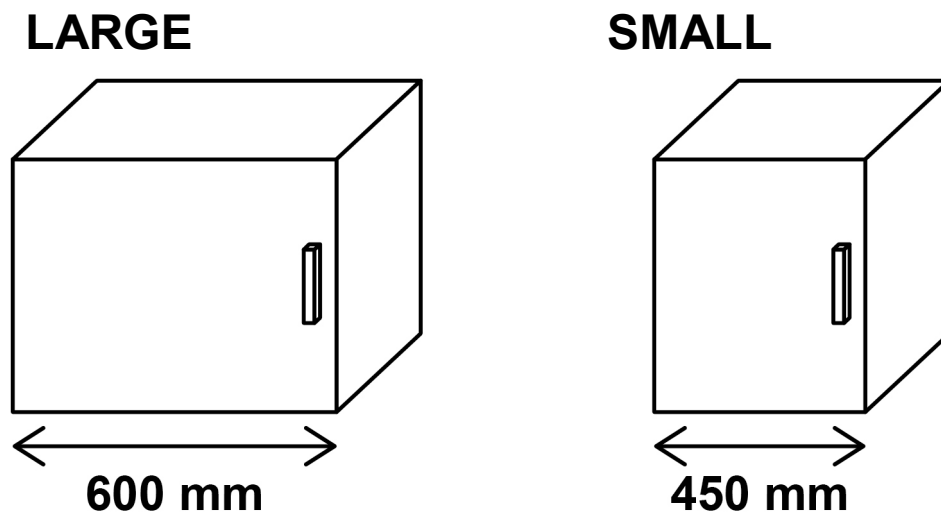
Answer ALL questions in the spaces provided.

**9 THE KITCHEN FITTER**

Ryan is a kitchen fitter.

- 9 (a) A customer wants cupboards along one wall of her kitchen.

Ryan can choose from these cupboards.



He can choose some of each size.

The length of the wall is 3.45 METRES.



**How many of each cupboard could Ryan choose so that they fit the length of the wall with no gaps? [4 marks]**

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**Number of large cupboards** \_\_\_\_\_

**Number of small cupboards** \_\_\_\_\_

**[Turn over]**

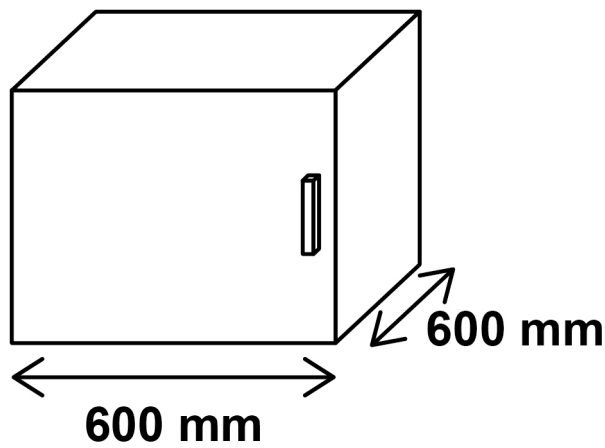


9 (b) A different customer wants

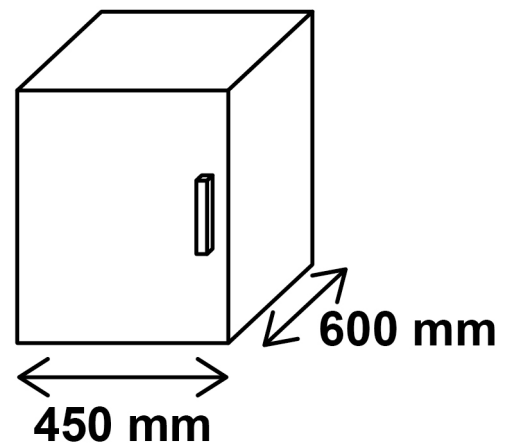
3 large cupboards with width 600 mm and depth 600 mm

2 small cupboards with width 450 mm and depth 600 mm

**LARGE**



**SMALL**



The cupboards will fit along **ONE** wall of this customer's kitchen.

The grid on the page opposite shows a scale drawing of the kitchen.

The scale is 1 cm represents 150 mm

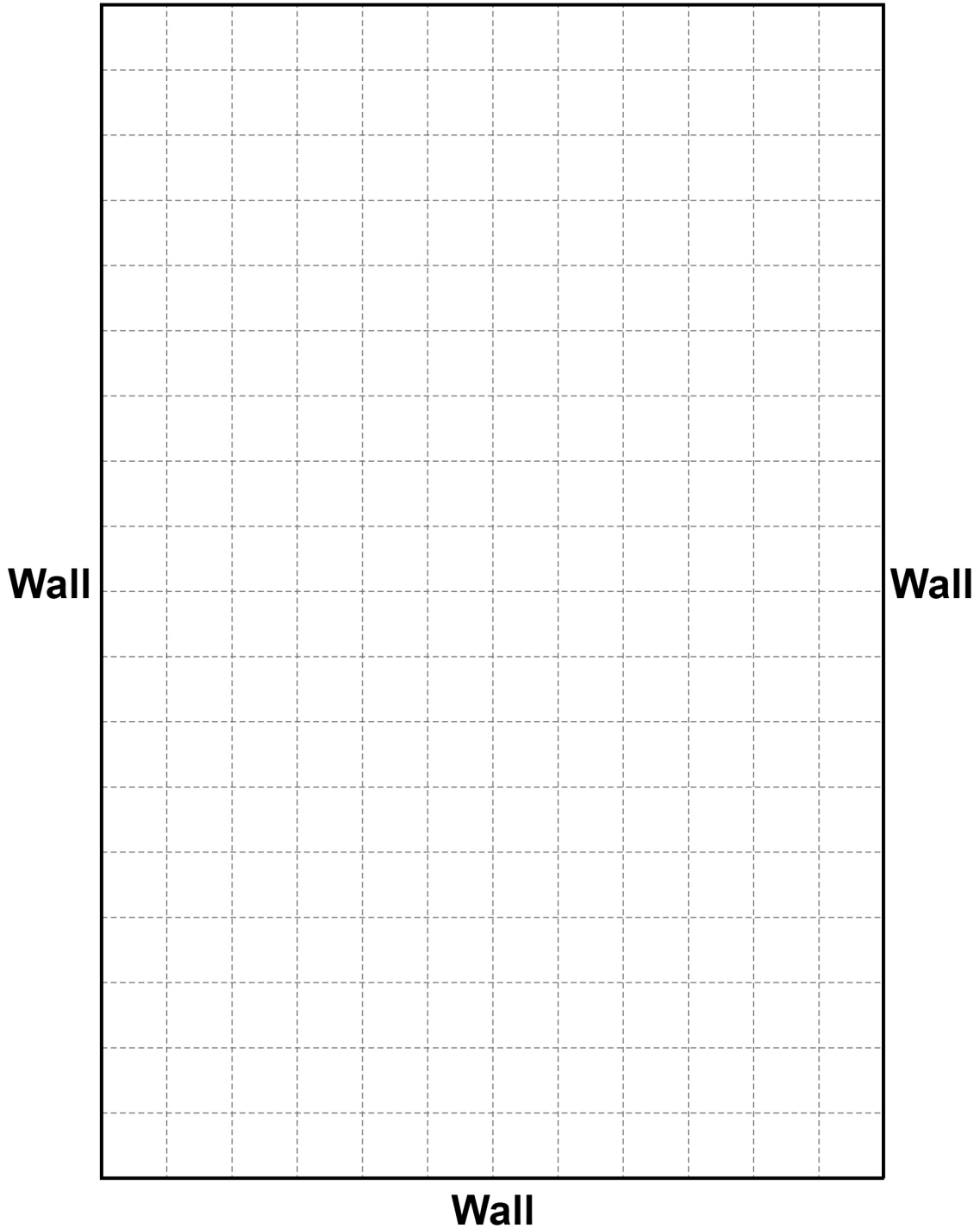
Use the grid to draw a plan of where Ryan could fit the cupboards. [4 marks]



13

SCALE: 1 cm represents 150 mm

Wall



[Turn over]



- 9 (c) This is the price list for Ryan's kitchen cupboards.

	Price per cupboard
Large cupboard	£85.50
Small cupboard	£75.00

There is a special offer.

Large cupboards

Buy one, get one half price

A customer wants to order

6 large cupboards

and

2 small cupboards.

The customer has a budget of £550

Does the customer have enough money to buy these cupboards?

You **MUST** show your working. [5 marks]

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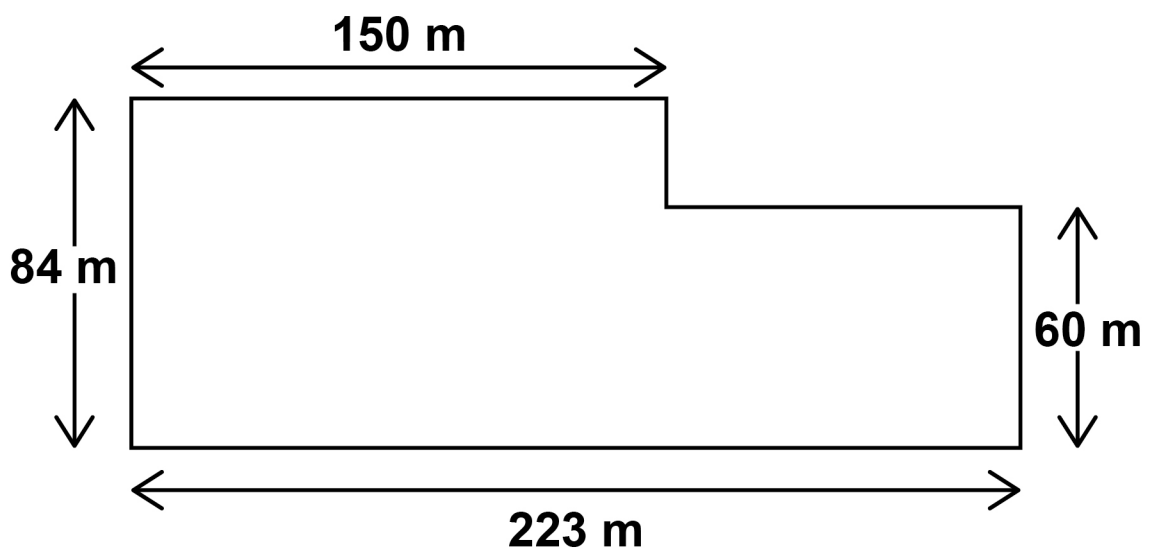
**10 FLOWER FARM**

**Erik grows daffodils on his farm.**



**10 (a) This is a sketch of a field where Erik will grow daffodils.**

**It is not drawn accurately.**





Erik plants 1.25 kg of daffodil bulbs per square metre of land.

He has 20 tonnes of bulbs.

1 tonne = 1000 kg

Does Erik have enough bulbs to plant all of this field?

You MUST show your working. [5 marks]

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[Turn over]



**10 (b) Joe picks flowers on Erik’s farm.**

**Joe is paid £8.29 for each box he fills with flowers.**

**The flower-picking season lasts for 10 weeks.**

**The list shows the number of boxes Joe filled each week for the first 5 weeks.**

**55            47            45            44            59**

**Estimate how much Joe can expect to earn for the full 10-week season.**

**You MUST show your working. [4 marks]**

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**Answer £** \_\_\_\_\_

**[Turn over]**

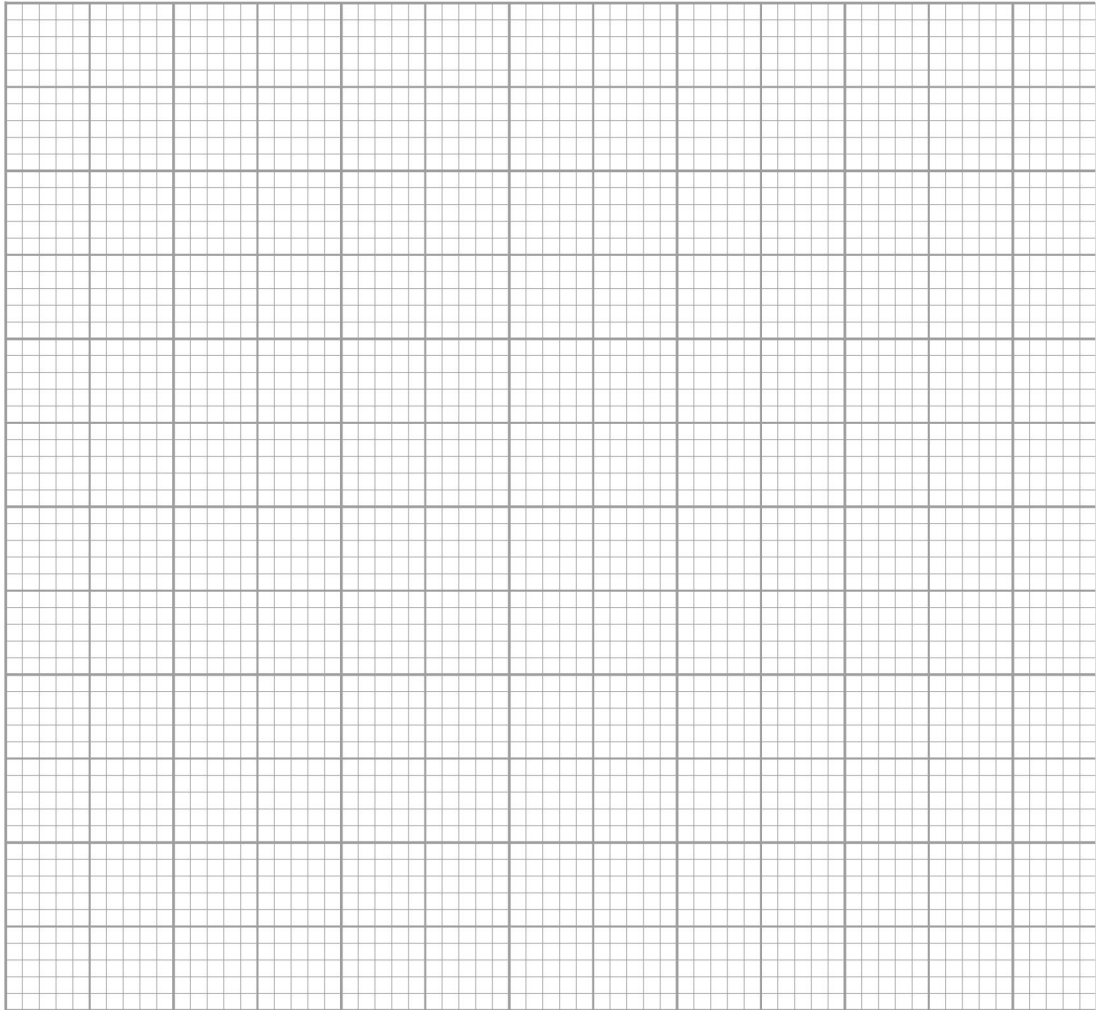
- 10 (c) Erik plants different types of daffodils in his fields.

Here is some data about the area he planted with each type of daffodil.

Type of daffodil	Area planted (m <sup>2</sup> )
Golden Ducat	88 000
White Lion	72 000
Ice Follies	46 000
Pink Pride	34 000

On the opposite page, draw a suitable chart to show this data. [4 marks]





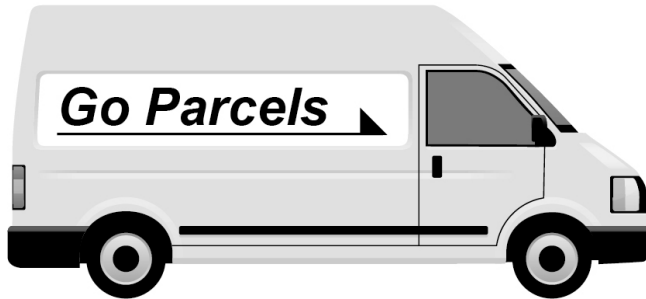
[Turn over]

13



## 11 PARCELS

Sam sends parcels using couriers.



- 11 (a) The table shows information about the cost of sending parcels with Go Parcels.

WEIGHT RANGE	COST
Up to 1 kg	£5.99
More than 1 kg up to 10 kg	£12.99
More than 10 kg up to 15 kg	£14.24
More than 15 kg up to 20 kg	£25.49

Sam needs to send items weighing 2 kg, 4 kg and 11 kg

Sam can combine the three items into one parcel before sending.

How much cheaper is it to send one combined parcel rather than three separate parcels?  
[4 marks]



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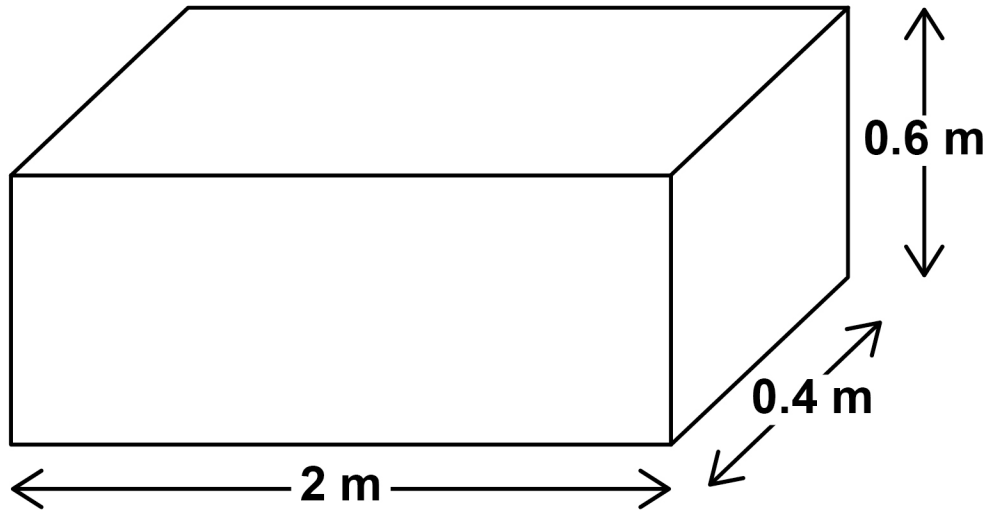
Answer £ \_\_\_\_\_

[Turn over]



- 11 (b) Sam sends a parcel with a different courier, Package Plus.

The parcel is a cuboid box measuring 2 m by 0.4 m by 0.6 m



Package Plus charges using the formula

$$\text{Cost (£)} = \text{£15.25} + (\text{volume of parcel in m}^3 \times \text{£4.25})$$

Sam pays with a £20 note.

How much change should Sam receive?  
[5 marks]

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Answer £ \_\_\_\_\_

[Turn over]

9



**12 THE THEATRE**

**Amy is going to a theatre show in Chichester.**

**12 (a) Amy will travel by train to Chichester.**

**Amy has a railcard that gives her**

**$\frac{1}{3}$  off the normal price of a train ticket.**

**The normal price of a return ticket to Chichester is £16.83**

**Amy says,**

**“My ticket will cost LESS THAN £11 if I use my railcard.”**

**Is Amy correct?**

**You MUST show your working. [3 marks]**

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**[Turn over]**



**12 (b) The theatre sells ice creams at the interval.**

**All the ice creams cost the same amount.**

**Amy buys herself and her two friends an ice cream each.**

**The total cost is £8.40**

**How much does it cost to buy 7 ice creams?  
[3 marks]**

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Answer £ \_\_\_\_\_

[Turn over]

**12 (c) At the theatre, the show starts at 7.30 pm**

**The show lasts for 105 minutes plus a 20-minute interval.**

**At the end of the show, it will take Amy 35 minutes to get to the station.**

**A train leaves the station at 22.17**

**Can Amy catch this train?**

**You MUST show your working. [4 marks]**

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[Turn over]



**12 (d) Jai works in the box office at the theatre.**

**The theatre has 1206 seats.**

**For this performance, the ratio of tickets sold to tickets not sold is 5 : 1**

**Jai says,**

**“We have sold more than 1000 tickets for this performance.”**

**Show that he is correct. [3 marks]**

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**END OF QUESTIONS**

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<b>13</b>



**Additional page, if required.**

**Write the question numbers in the left-hand margin.**


Additional page, if required.

Write the question numbers in the left-hand margin.




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For Examiner's Use	
Question	Mark
1–8	
9	
10	
11	
12	
<b>TOTAL</b>	

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