

NCFE Entry Level 3 Functional Skills Qualification in Mathematics (603/5061/1)

Paper number: SAM
Section B: Calculator Test



Time allowed: 1 hour 15 minutes

Learner instructions

- Answer **all** questions.
- Read each question carefully.
- Write your answers in the spaces provided.
- Show your working, as marks may be awarded for working.
- This shows you where to write your working and answers.
- State units in your answers, where appropriate.
- Check your work.



Learner information

- Section B contains **Activity 2, 3 and 4**.
- The maximum mark for this section is **30**.
- The marks available for **each** question are shown in brackets.

Resources

You will need:

- a pen, with black or blue ink
- a pencil and eraser
- a 30 cm ruler
- a calculator.

Please complete the details below clearly and in BLOCK CAPITALS.

Learner name _____

Centre name _____

Learner number

Centre number

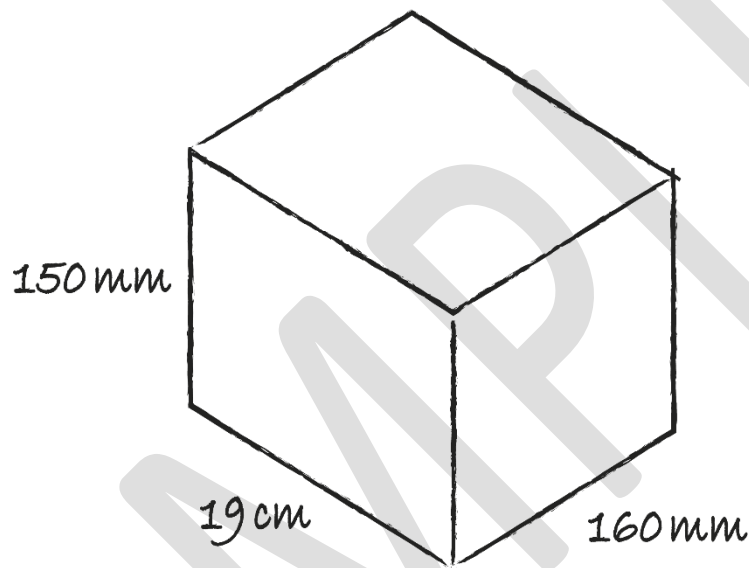
Do not turn over until the invigilator tells you to do so.

Activity 2: Shop Deliveries

Sally deals with deliveries.

2 (a) Sally measures a delivery carton.

She writes the measurements on her drawing below.



What is the length of the longest edge?

[2 marks]

2 (b) How many right angles are on one face of the delivery carton?

[1 mark]



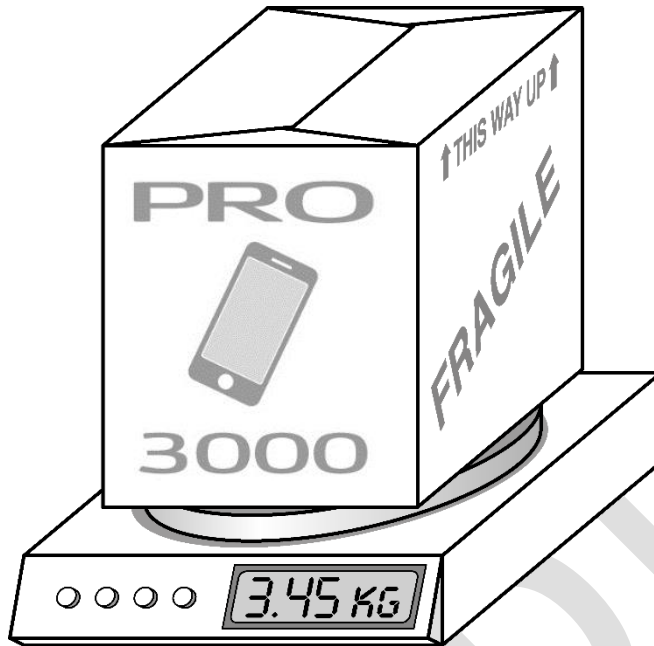
SAMPLE

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2 (c)

Sally weighs a delivery carton on an electronic scale.

She will have to pay a fee if it weighs more than 3.5 kg.

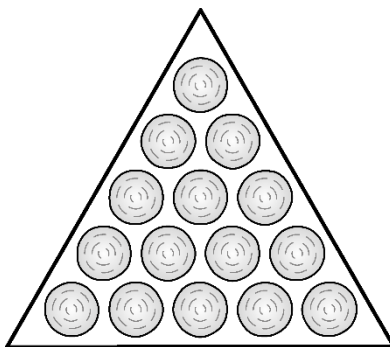


Will Sally have to pay the fee? Give a reason for your answer.

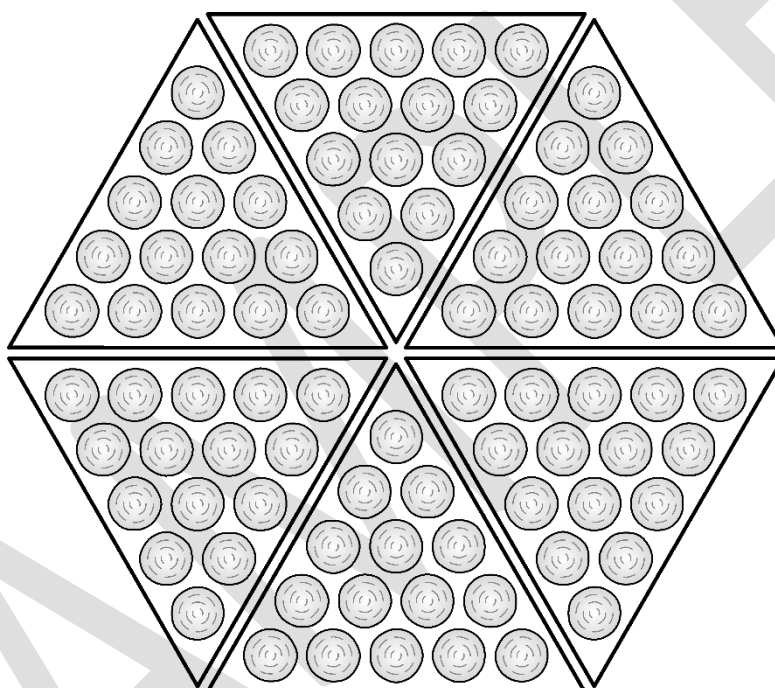
[1 mark]



- 2 (d) The mobile phone shop sells batteries. The batteries come in triangular boxes.
Each box holds 15 batteries.



Six triangular boxes are packed into one large box.



A customer orders 11 large boxes.

How many batteries does the customer order in total?

Show your working.

[2 marks]



Please turn over

2 (e) Sally has to deliver 42 boxes of the batteries altogether.

Each box weighs 19kg.

Sally uses multiplication to work out the total weight.

$$42 \times 19 = 798$$

Sally checks her answer by rounding the numbers to the nearest 10.

Show how she does this.

[2 marks]

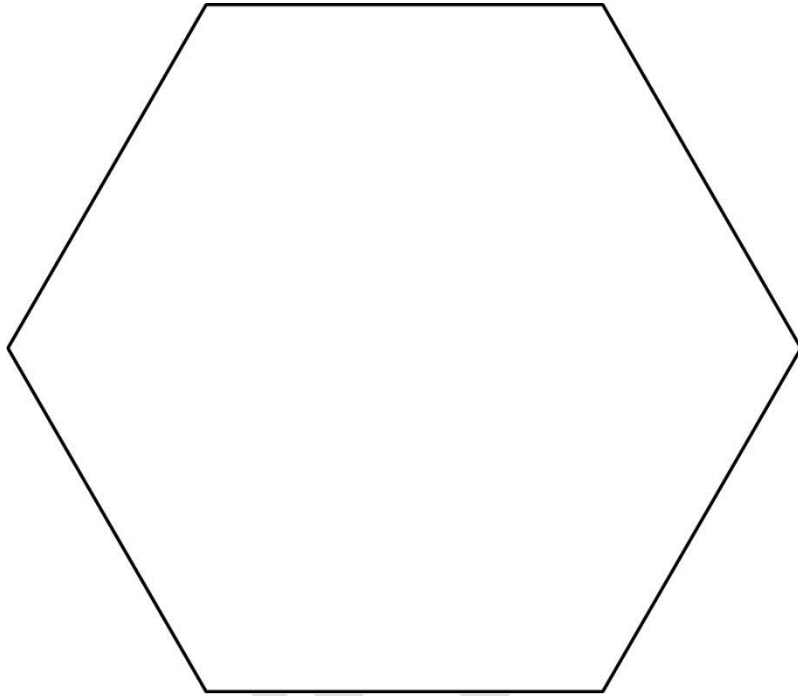


A large empty rectangular box for showing the student's work. A large, light grey watermark reading "SAMPLE" is diagonally across the page.

2 (f)

Draw all of the lines of symmetry on the large box.

[2 marks]



SAMM

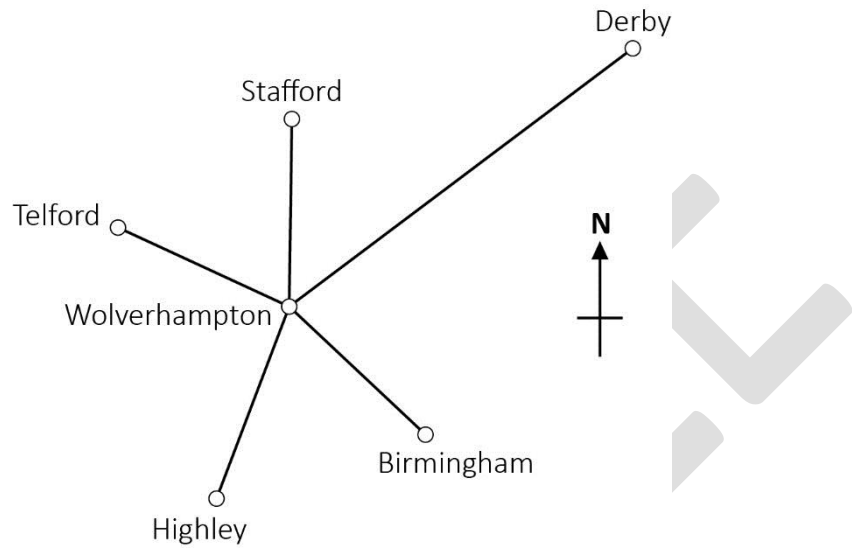
[Total marks: 10]

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Activity 3: Sales manager

Asha is the sales manager for six shops.

3 (a) Asha travels from Jack's shop in Wolverhampton to the other shops.



Which direction is the Derby shop from Wolverhampton?

[1 mark]



3 (b)

Asha writes down her visits to each shop in her diary.

<p>this week</p> <hr/> <p>monday</p> <p><i>Birmingham, Highley, Telford, Stafford</i></p> <hr/> <p>tuesday</p> <p><i>Derby, Stafford, Highley</i></p> <hr/> <p>wednesday</p> <p><i>Birmingham, Highley, Stafford, Derby</i></p> <hr/>	<p>thursday</p> <p><i>Derby, Highley, Stafford, Telford</i></p> <hr/> <p>friday</p> <p><i>Derby, Highley, Stafford</i></p> <hr/> <p>saturday</p> <p><i>Birmingham, Highley</i></p> <hr/> <p>sunday</p> <hr/>
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Complete the frequency table to show the number of visits.

[1 mark]

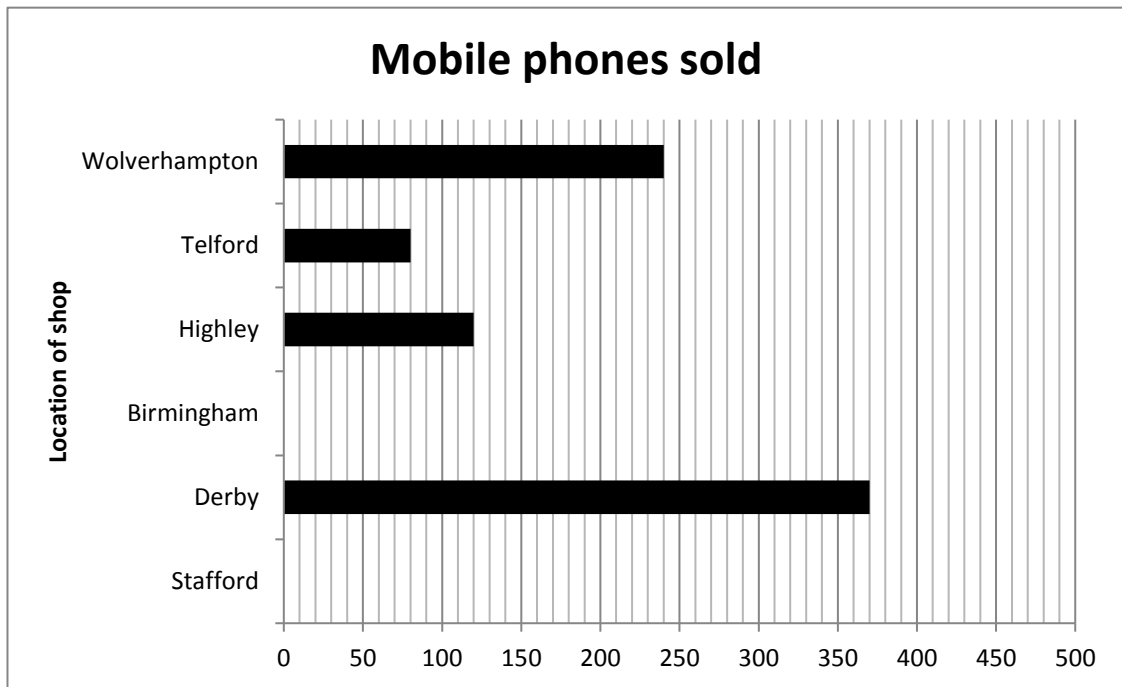


Shop	Frequency
Birmingham	
Derby	
Highley	
Stafford	
Telford	

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3 (c)

Asha has a chart to show the number of mobile phones sold in each of the six shops in one month.



She knows that

- Birmingham sold 90 less phones than Derby
- Stafford sold double the number of phones that Wolverhampton sold.

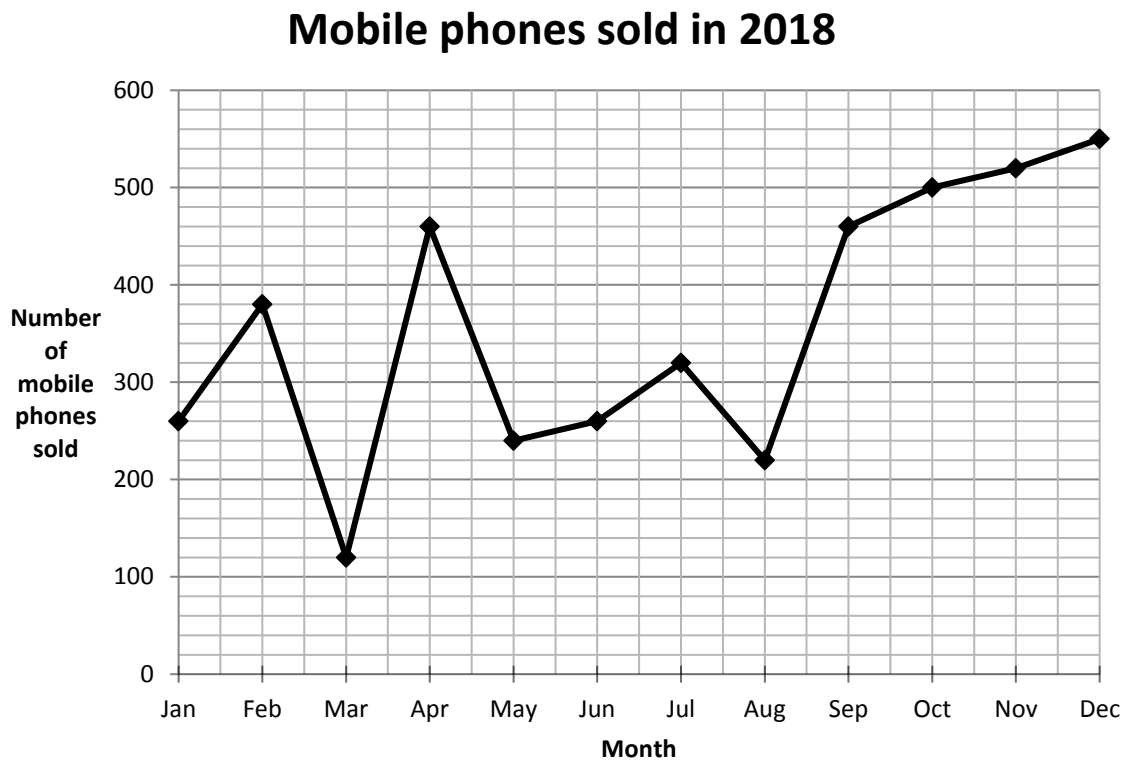
Complete the chart for Asha. **Show your working.**

[4 marks]



Blank area for completing the chart and showing working.

- 3 (d) This graph shows the number of mobiles phones that Jack's shop sold each month in 2018.



Jack tells Asha, 'In the month with the highest sales, we sold 5 times more phones than in the month with the lowest sales.'

Is Jack correct? **Show how you decide.**

[4 marks]



[Total marks: 10]

Please turn over

Activity 4: Serving customers

Sid is serving customers in the mobile phone shop.

4 (a) Sid shows a customer a new phone.



The customer pays an equal amount every month for 24 months.

How much will the customer pay each month? **Show your working.**

[2 marks]



4 (b) The customer buys the following items.

Item	Price
Phone case	£8.95
Headphones	£45.75
Car charger	£4.33

The customer pays with £60.

She thinks she will get £1.97 change.

Is she correct? **Show your working.**

[2 marks]



4 (c) Sid rounds each of the costs to the nearest £ to check the total.

Show how he does this.

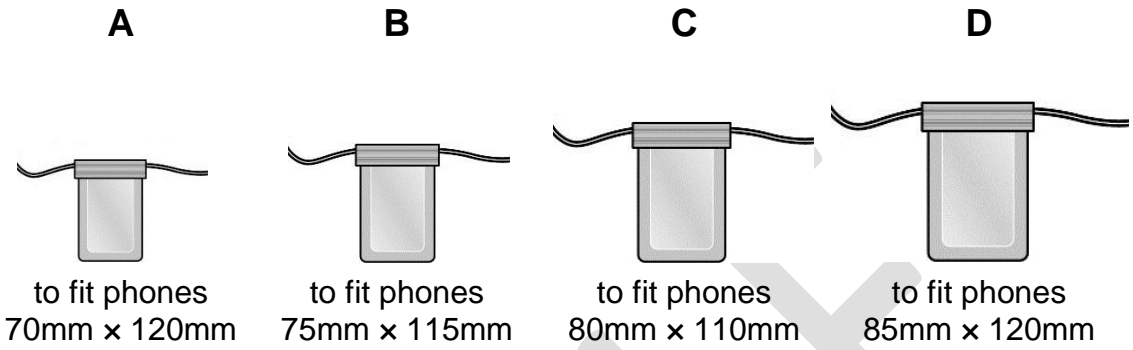
[2 marks]



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4 (d) The shop sells waterproof bags for mobile phones.

A customer has a phone that measures 72mm × 114mm.



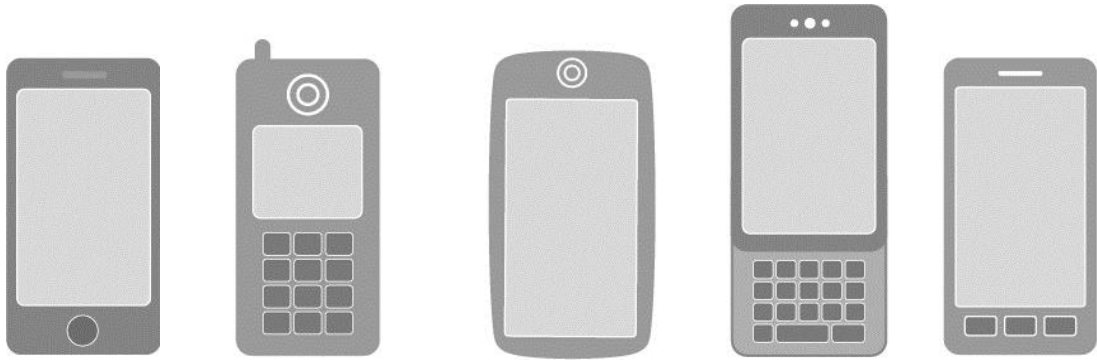
The customer wants the smallest bag that their phone will fit in.

Which is the best bag for the customer to buy?

[1 mark]



4 (e) A new phone weighs 10g less than the lightest phone in the shop.



A 140 g	B 0.12 kg	C 197 g	D 0.11 kg	E 205 g
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What does the new phone weigh? **Show your working.**

[2 marks]



4 (f) Sid decides to have a competition. There are six prizes to be won.

He gives a £10 prize to every 15th customer.

Complete the table below.

Customer Number	15	30	45			
Prize Number	1 st prize	2 nd prize	3 rd prize	4 th prize	5 th prize	6 th prize

[1 mark]

[Total marks: 10]

This is the end of the assessment.