

Pearson Edexcel Functional Skills – Entry 2

Mathematics



Entry 2

Section A – Non-calculator

Sample Entry 2 sample assessment materials for first teaching September 2019

Time: 25 minutes

Candidate name

Candidate signature

Date

You must have a

- black or blue ink pen
- pencil
- ruler
- rubber.

Instructions

- Answer every question.
- You can write or draw to show your answers.
- You must **not** use a calculator.

Information

- The total number of marks for this section is 7.

Advice

- Read each question carefully.
- Check your work at the end.
- Ask if you do not understand any words.

The Examiner explains

Each paper opens with the same familiar layout including:

- Equipment required
- Instructions candidates must follow
- Information about the marks
- Supportive advice on technique

All candidates should be made aware of this information before they start

Turn over ►



Pearson

1 Liv drives her car to work.
She works out the monthly cost of parking.

She does this calculation.

$$84 \square 12 = 7$$

The Examiner explains
Question and key information is written in bold

What is the missing symbol?

(1)

Tick (✓) the correct answer.

+
()

-
()

The Examiner explains
To help you see how the mark scheme works they have been printed alongside each question

×
()

÷
()

The Examiner explains
Breakdown of marks for each question

Question	Answer	Mark(s)	Content
1	Indicates ÷ and no other	1	E2.4

The Examiner explains
Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting

The Examiner explains
References the subject content within the E2 specification

2 Liv is thinking about going to work by bus.

The journey by bus takes 52 minutes.

The journey by car takes 35 minutes.

Liv says the car takes 23 minutes less than the bus.

Is Liv correct?

You must show your working.

(2)

Show your working and your answer in the box below.

The Examiner explains

Working is essential in this type of question requiring a decision

Candidates must show working with their answer to their decision

The Examiner explains

Prompts the candidate to give a decision

Tick (✓) the correct answer.

Yes ()

No ()

The Examiner explains
 1 mark is awarded for showing
 A valid process with no answer/decision
 OR
 A valid process with an incorrect answer/decision

The Examiner explains
 'Valid process' means any method
 that is complete and correct

Question	Answer	Mark(s)	Content
2	Valid process to compare the journeys e.g. 52 - 35 OR 52 - 23 OR 23 + 35	1 or	E2.5
	No AND 17 (minutes) OR No AND 29 (minutes) OR No AND 58 (minutes) OR No AND 6 (minutes)	2	E2.5

The Examiner explains
 The correct number of minutes
 AND
 A correct decision must be
 shown to award 2 marks

The Examiner explains
 Award 2 marks for
 No process shown, correct answer/decision
 OR
 Valid process, correct answer/decision
 OR
 Invalid process, correct answer/decision

3 Liv drives 9 km between home and work 8 times a week.

She works out how far she drives in a week.

$$8 \times 9 = \square$$

Complete the calculation.

(1)

Show your answer in the box below.

$8 \times 9 = \underline{\hspace{2cm}} \text{ km}$

The Examiner explains

If the answer is clearly given, accept even if it is not in the answer box

Question	Answer	Mark(s)	Content
3	72 (km)	1	E2.6

The Examiner explains

Information in brackets is optional; it is not required to award marks

4 At work Liv puts apple pies into boxes.

Liv has 42 apple pies.

Each full box has 9 apple pies.

How many full boxes of apple pies does Liv have?

Show how many apple pies are left over.

(3)

Show your working and your answers in the box below.

The Examiner explains
If the answer is clearly given, accept even if it is not in the answer box

_____ full boxes

_____ apple pies left over

The Examiner explains

Award 1 mark for
A valid process with no number of full boxes or
apple pies left over given
OR
A valid process with incorrect number of full
boxes or apple pies left over given

The Examiner explains

Award 2 marks for indicating correct
number of full boxes OR apple pies
left over

		Mark(s)	Percent
4	Valid process to find the number of full boxes e.g. $42 \div 9$	1 or	E2.8
	4 (full boxes) OR 6 (apple pies left over)	2 or	E2.8
	4 (full boxes) AND 6 (apple pies left over)	3	E2.8
	Accept only if 4 is clearly the number of full boxes and 6 is the remainder		

The Examiner explains

Award 3 marks for
No process shown with correct number of full
boxes AND apple pies left over given
OR
Valid process with correct number of full boxes
AND apple pies left over given
OR
Invalid process, correct number of full boxes AND

Pearson Edexcel Functional Skills – Entry 2

Mathematics



Entry 2

Section B – Calculator

Sample Entry 2 controlled assessment materials for
first teaching September 2019

Time: 65 minutes

Candidate name

Candidate signature

Date

You must have a

- black or blue ink pen
- pencil
- ruler
- rubber
- calculator.

Instructions

- Answer every question.
- You can write or draw to show your answers.
- You may use a calculator.

Information

- The total number of marks for this section is 21.

Advice

- Read each question carefully.
- Check your work at the end.
- Ask if you do not understand any words.

The Examiner explains

Each paper opens with the same familiar layout
Including

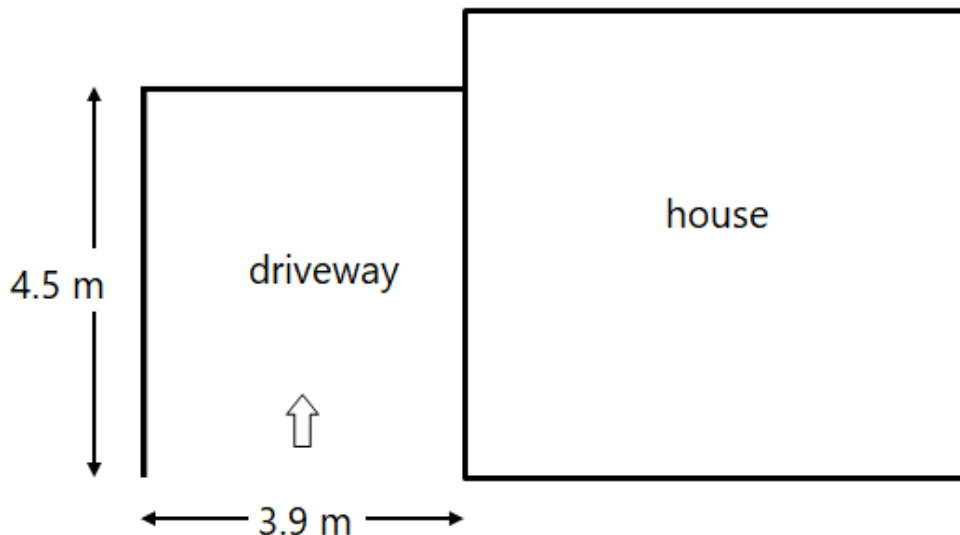
- Equipment required
- Instructions candidates must follow
- Information about the marks
- Supportive advice on technique

All candidates should be made aware of this
information before they start

Turn over ►

1 Alex wants to buy a car.

He has a plan of his house and driveway.



Alex wants the longest car that fits his driveway.

Length of cars for sale						
car	A	B	C	D	E	F
length (m)	4.2	3.8	4.6	4.8	4.4	4.7

Which car will Alex choose?

(1)

Show your answer in the box below.

The Examiner explains

The candidate needs to extract information from a table

The Examiner explains

If the answer is clearly given, accept even if it is not in the answer box

Question	Answer	Mark(s)	Content
1	Indicates (car) E OR 4.4 (m) and no other	1	E2.22

The Examiner explains

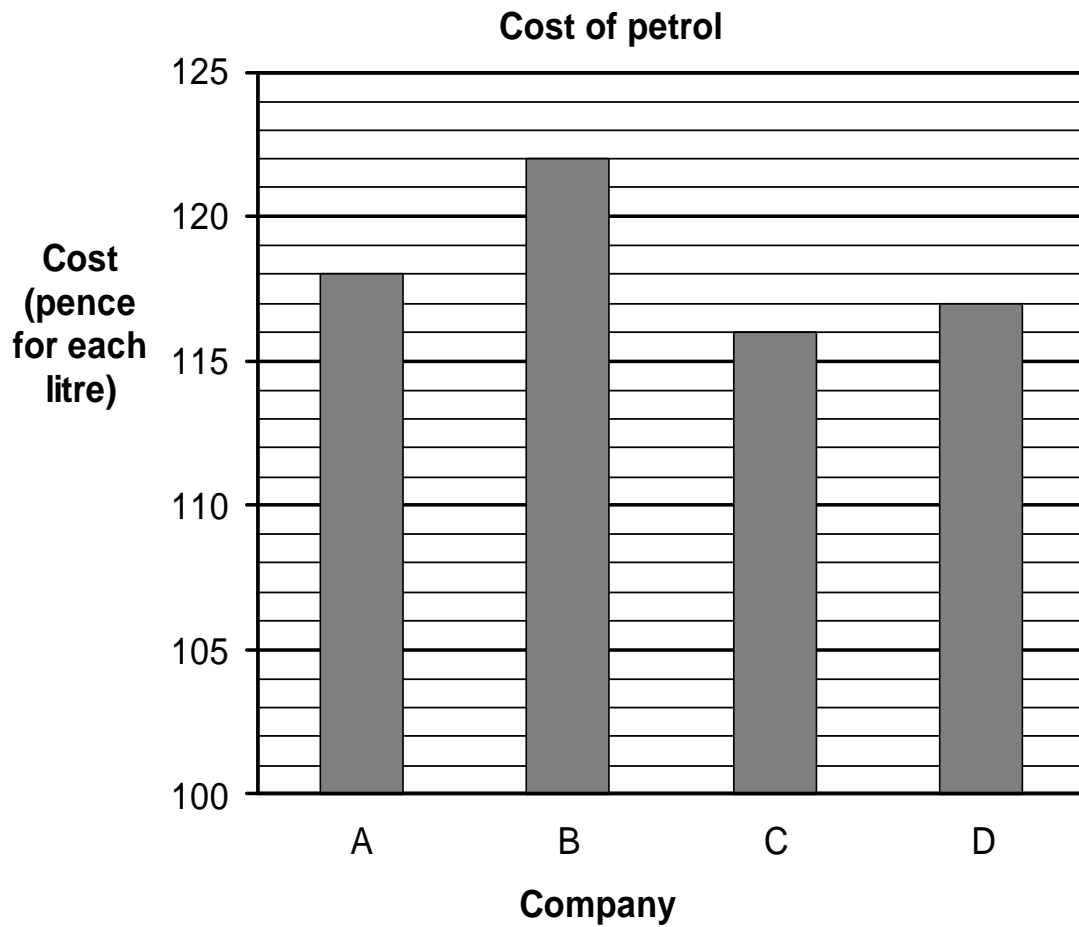
Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting

The Examiner explains

References the subject content within the E2 specification

2 The chart shows the costs of petrol from different companies.



How much more does petrol cost from company B than company D?

(1)

Show your answer in the box below.

The Examiner explains

The candidate needs to read the scale on the bar chart correctly and make a comparison

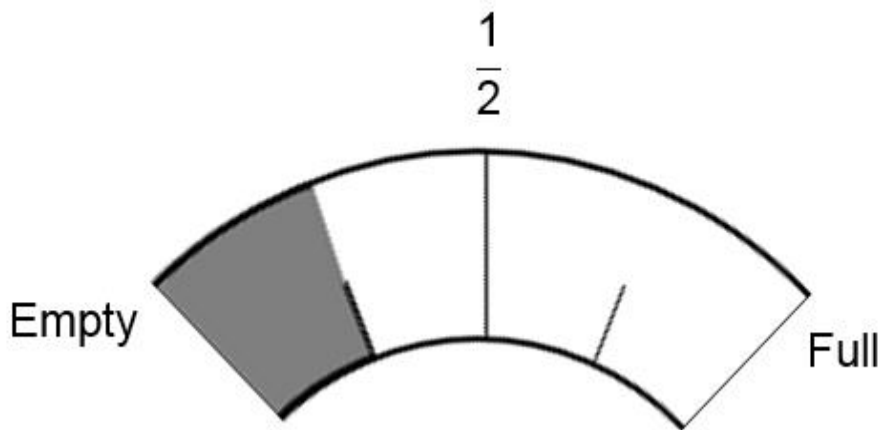
_____ pence for each litre

Question	Answer	Mark(s)	Content
2	5 (pence for each litre)	1	E2.23

The Examiner explains
Information in brackets is optional;
it is not required to award marks

3 Alex has a full tank of petrol on Monday.

The diagram shows his petrol gauge on Friday.



What fraction of the petrol is left?

(1)

Show your answer in the box below.

The Examiner explains
The candidate needs to recognise simple fractions

Question	Answer	Mark(s)	Content
3	$\frac{1}{4}$ Accept in words, e.g. one quarter	1	E2.10

The Examiner explains
Accept any understandable spelling

The Examiner explains

The candidate needs to sort and classify objects using two criteria

4 Alex needs to buy petrol.

He goes to the nearest service station that is open.

Which service station does he choose?

(1)

Tick (✓) the correct answer.

distance 7 km
closed

()

distance 19 km
open

()

distance 23 km
closed

()

distance 17 km
open

()

distance 22 km
open

()

distance 15 km
closed

()

Question	Answer	Mark(s)	Content
4	Indicates (the service station) 17 (km away) and no other	1	E2.24

The Examiner explains

Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting

5 Alex and his friend go to a concert by car.

The 2 friends share the cost equally.

The cost of the journey is £36

The Examiner explains

The candidate needs to divide a two-digit whole number

How much money does each of them pay?

Use the correct symbol for money.

(3)

Show your working and your answer in the box below.

The Examiner explains

The candidate needs to calculate money and write with the correct symbol

The Examiner explains

Candidates can use more than one method to work out their answer. Any appropriate method is valid

Question	Answer	Mark(s)	Content
5	Valid process to find each friend's share e.g. $36 \div 2$	1 or	E2.8
	(£)18	2	E2.8
	Correct use of £ symbol with their value	1	E2.12

The Examiner explains

Award this mark if the candidate has given an incorrect answer but has correct use of a £ symbol

6 a) Round 36 to the nearest 10

(1)

Show your answer in the box below.

The Examiner explains

The candidate needs to approximate by rounding

b) Use the rounded number to check your answer to question 5

(1)

Show your check in the box below.

The Examiner explains

The candidate needs to use their rounded answer to check results

The Examiner explains

The number must be correctly rounded to gain this mark

Question	Answer	Mark(s)	Content
6a	40		E2.9
6b	Correct answer from the check, i.e. (40 ÷ 2 =) 20	1	E2.9
	Accept (40 ÷ 18 =) 2.2... Award this mark for a correct answer based on an incorrect rounding of 36	1	

The Examiner explains

A reverse calculation using a rounded figure is expected here

The Examiner explains

Information in brackets is optional; it is not required to award marks

7 Alex needs to buy car wax.

Price list

Turbo jet washer	£55
Solo car wax	£32
Quix car wax	£26
Kleano screen wash	£21
Auto car wax	£19
Handy brush	£13
Maxon wheel cleaner	£11

Alex has £25 to spend.

Which car wax can Alex buy?

(1)

Show your answer in the box below

The Examiner explains

The candidate needs to read the question carefully to ensure they extract the correct information from the list

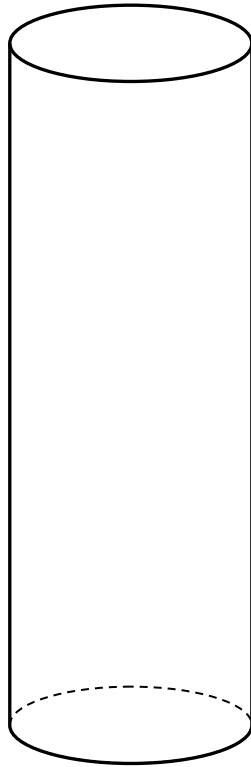
Question	Answer	Mark(s)	Content
7	Indicates Auto (car wax) OR £19 and no other	1	E2.22

The Examiner explains

Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting

8 This is the shape of a can of cleaning spray.



What is the name of this shape?

(1)

Show your answer in the box below

The Examiner explains

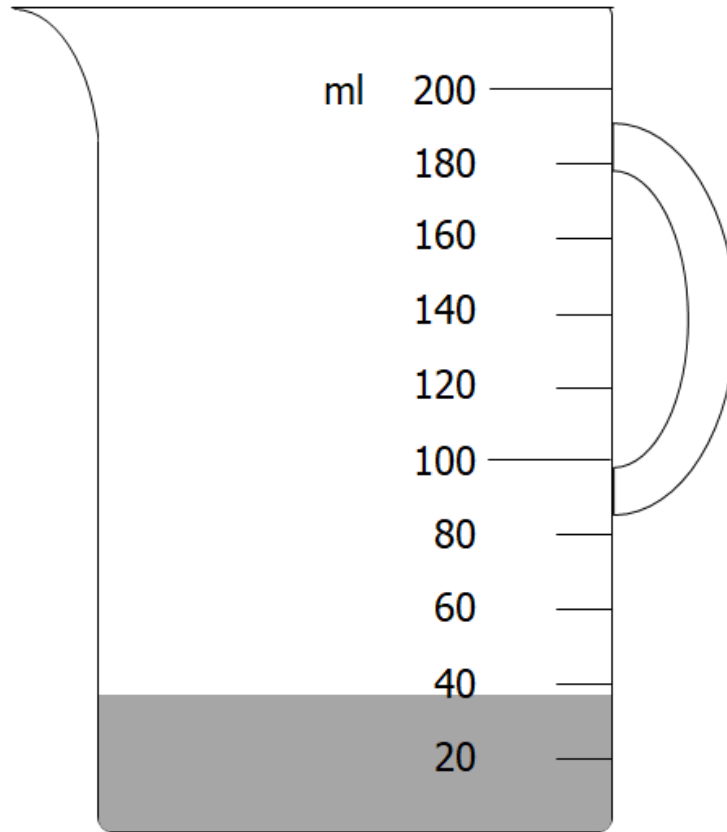
The candidate needs to recognise and name the 3-D shape

Question	Answer	Mark(s)
8	cylinder Accept any reasonable spelling	1

The Examiner explains
Accept any understandable spelling

9 Alex makes a mixture of screen wash and water.

He pours screen wash into a measuring jug.



Alex will add 80 ml of water to the jug.

How much mixture will he have to the nearest division?

Use the correct unit for capacity.

Show your answer in the box below

(3)

The Examiner explains
Correct units for capacity
need to be shown

The Examiner explains
The candidate needs to
read the question
carefully to ensure they
add the amount of
screen wash in the jug
and the given amount of
water and give the total
amount of mixture Alex
will have

The Examiner explains

If the candidate reads the scale on the jug to the nearest labelled division OR shows incorrect total within the given tolerance they achieve 1 mark. Units of measurement are not required.

Question	Answer	Mark(s)	Content
9	Indicates 40 (ml) Accept written answers from 36 (ml) and less than 40 (ml) OR written answers from 116 (ml) and less than 120 (ml)	1 or	E2.18
	Indicates 120 (ml)	2	E2.18
	Correct use of units i.e. ml or millilitres with their value	1	E2.16

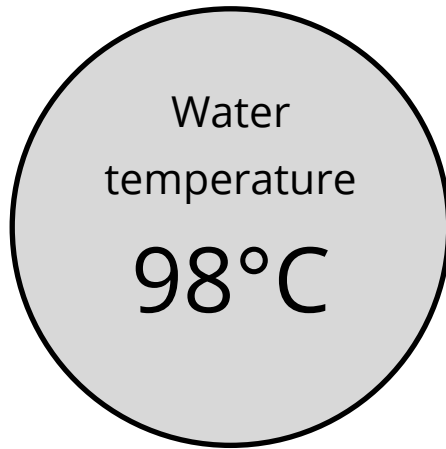
The Examiner explains

Award this mark if the candidate has given an incorrect answer but has shown correct use of units.

The Examiner explains

Award 2 marks if they have totalled the mixture to the nearest labelled division correctly. Units of measurement are not required.

10 Alex looks at the water temperature gauge in his car.



The normal water temperature is 79°C.

How much hotter is the water than normal?

(2)

Show your working and your answer in the box below.

The Examiner explains
Candidates need to read and compare temperature

_____ °C

The Examiner explains

Candidates can use more than one method to work out their answer. Any appropriate method is valid

The Examiner explains

Award 1 mark for
A valid process shown with no answer given
OR
A valid process with an incorrect answer given

Question	Answer	Mark(s)	Content
10	Valid process to compare the temperatures, e.g. 98 – 79 19 (°C)	1 or 2	E2.17 E2.17

The Examiner explains

Information in brackets is optional; it is not required to award marks

The Examiner explains

Award 2 marks for
No process shown, correct answer given
OR
A valid process and correct answer given
OR
An invalid process with a correct answer

11 The results of a survey show how people get to work.

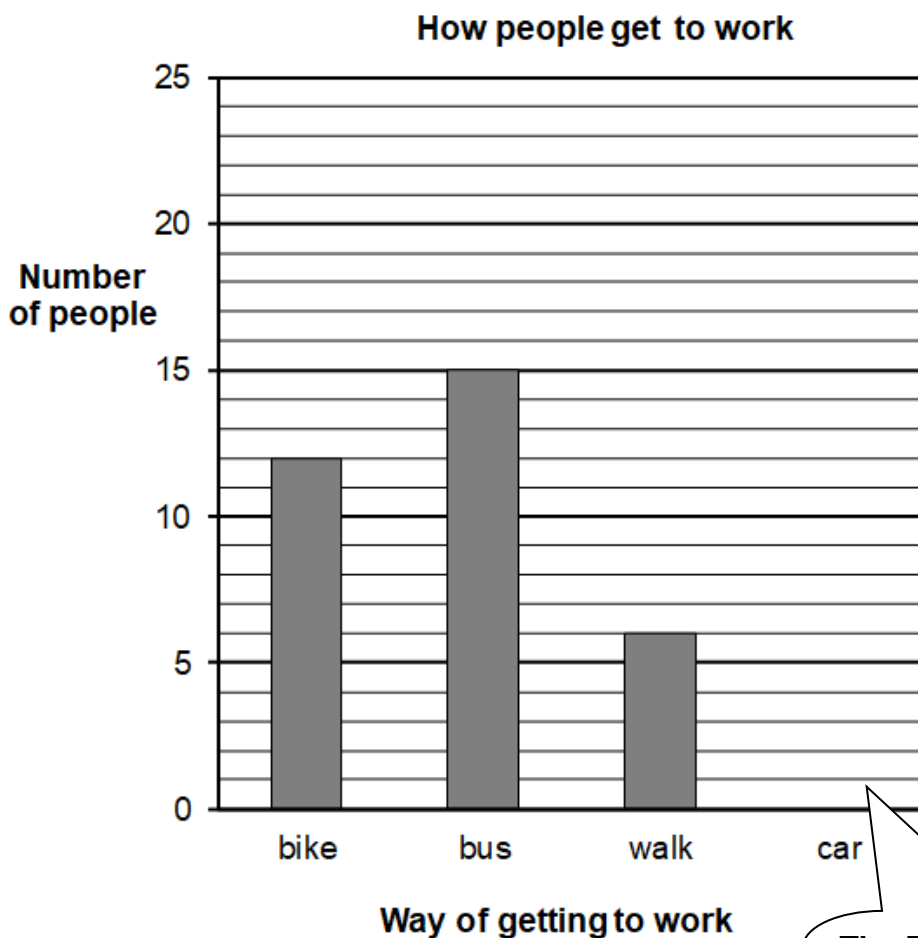
How people get to work	Number of people
bike	12
bus	15
walk	6
car	23

The Examiner explains
The candidate needs to take information from the table and represent the information in a bar chart

Alex needs a bar chart of the survey results

Show how many people get to work by car on the chart.

(1)

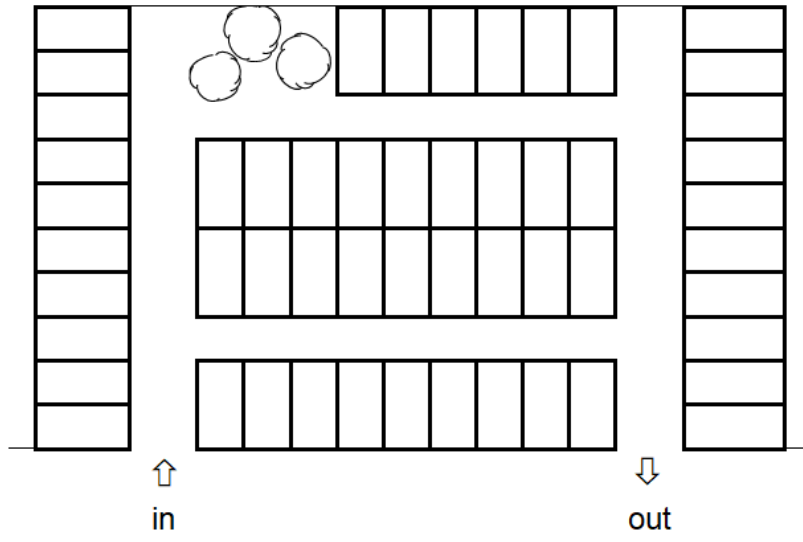


The Examiner explains
Accept a clear point or line indicating the correct value in the correct

Question	Answer	Mark(s)	Content
11	Draws a correct bar to show 23 people who use a car. Accept a clear point or line indicating the correct value in the correct position (above the category label for car)	1	E2.25

12 Alex parks his car at the company where he works.

These are the parking spaces.



Key: is one parking space

The company needs 57 parking spaces.

Are there enough parking spaces?

Show why you think this.

(1)

Show your answer in the box below.

The Examiner explains
The candidate needs to count reliably the number of parking spaces and make a decision

_____ parking spaces

Tick (✓) the correct answer.

Yes ()

No ()

Question	Answer	Mark(s)	Content
12	No AND 53 (parking spaces) OR No AND 4 (parking spaces)	1	E2.1

The Examiner explains

The correct number parking spaces
AND
A correct decision
must be shown to award 1 mark

13 A row of parking spaces has odd numbers.

23 25 27

What is the next odd number?

(1)

Show your answer in the box below.

The Examiner explains
The candidate needs to sequence odd numbers

23 25 27 _____

The Examiner explains
If the answer is clearly given, accept even if it is not in the answer box

Question	Answer	Mark(s)	Content
13	29	1	E2.3

14 Alex needs his car repaired.

He wants his car repaired between the 30th August and the 10th September.

The garage gives Alex dates when they can repair his car.

Which date will Alex choose?

The Examiner explains

The candidate needs to read time in common date format

(1)

Tick (✓) the correct answer.

Dates when the garage can repair the car

09/08/2019

()

18/09/2019

()

08/09/2019

()

19/08/2019

()

Question	Answer	Mark(s)	Content
14	Indicates 08/09/2019 and no other	1	E2.13

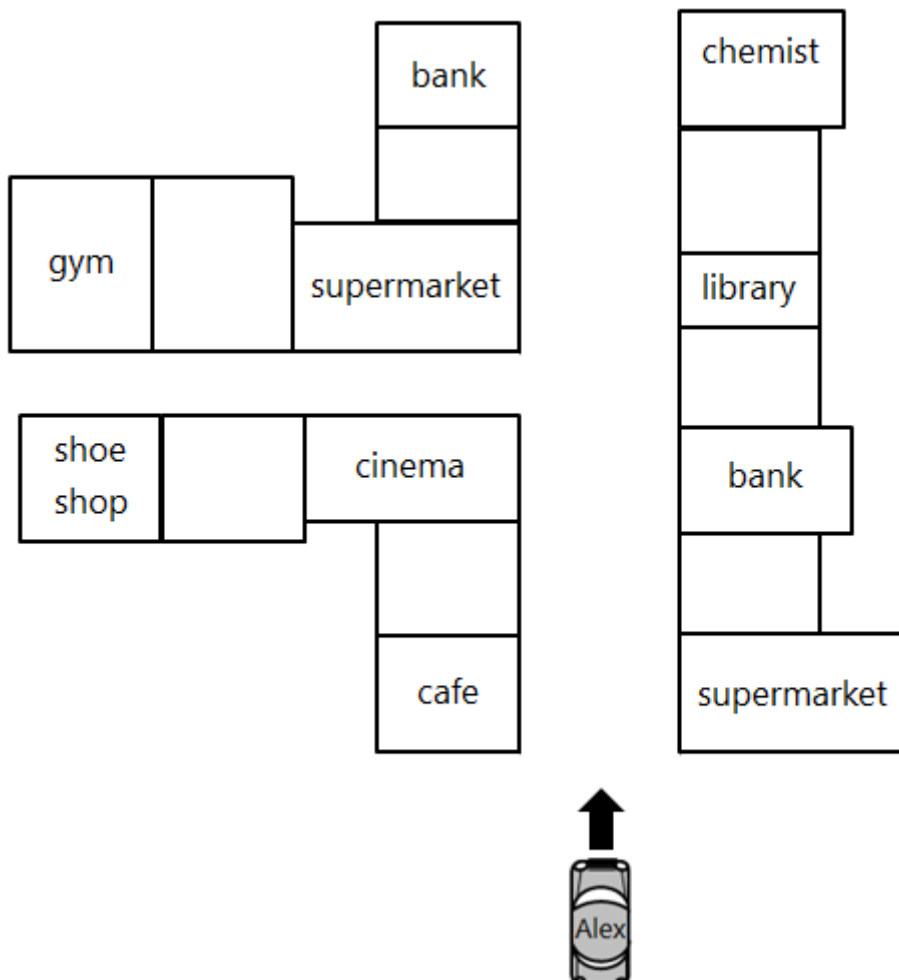
The Examiner explains

Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting

15 Alex takes his car to a garage.

He has a street map.



The garage is on the left between a supermarket and a bank.

Show where the garage is on the map.

(1)

The Examiner explains

The candidate needs to use appropriate positional vocabulary

Question	Answer	Mark(s)	Content
15	Indicates on the left between the supermarket and the bank and no other	1	E2.21

The Examiner explains

Accept any clear indication, for example:

- tick
- cross
- underline
- circling
- highlighting