Pearson Edexcel Functional Skills – Entry 3

Mathematics

Entry 3

Section A – Non-calculator

Sample Entry 3 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 answ
- You must **not** use a calculator.

Information
- The total number of marks for this section is 9.

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 Lyn moves to a new flat.

These are the amounts she spends each month on rent and bills.

Rent
£679

Bills
£138

Calculate the total of these amounts.

(2)

Show your working and your answer in the box below.

£_____

Question	Answer	Mark(s)	Content
1	Valid process to add 679 to 138 e.g. 679 + 138	1 or	E3.2

		817		2	E3.2

The Examiner explains
Breakdown of marks for each question

The Examiner explains
References the subject content within the E3 specification

2   Lyn puts DVDs on shelves.

She has 236 DVDs.

Each full shelf has 28 DVDs.

How many full shelves of DVDs does Lyn have?

Show how many DVDs are left over.   (3)

Show your working and your answer in the box below.

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

_____ full shelves of DVDs

Question	Answer	Mark	Content
2	Valid process to find the number of full shelves e.g. 236 ÷ 28	1 o	E3.3
	8 (full shelves) OR 12 (DVDs left over)	2 or	E3.3
	8 (full shelves) AND 12 (DVDs left over) Accept only if 8 is clearly the number of full shelves and 12 is the remainder	3	E3.3

3   Lyn pays for an internet contract.

> **Internet contract**
>
> £27 each month for 18 months

How much will Lyn pay in total for the internet contract?

(2)

Show your working and your answer in the box below.

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

£ _____

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

Question	Answer	Mark(s)	Content

3	Valid process to find the total cost, e.g. 27 × 18	1 or	E3.4
	(£)486	2	E3.4

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

4   Lyn wants to buy cleaning liquid for the flat.

She can choose 1 large bottle or 2 small bottles.

large bottle
1 litre

small
bottle
429 ml
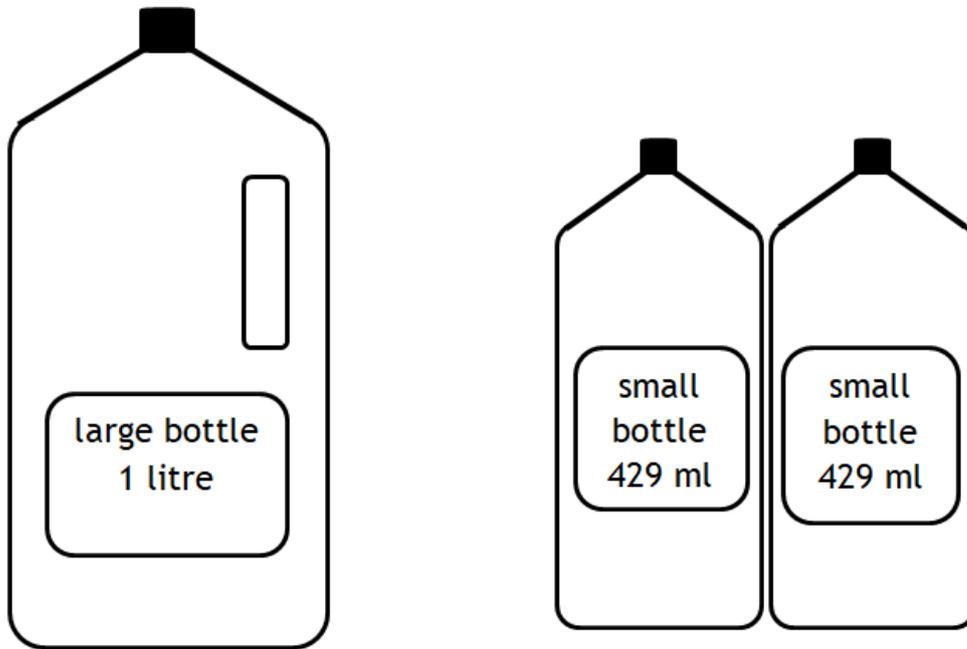
small
bottle
429 ml

Does 1 large bottle have more liquid than 2 small bottles?

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 ( )

Question	Answer	Mark(s)	Content
4	Valid process to compare capacities, e.g. 1000 − 429 OR 1000 ÷ 2 OR 429 + 429 AND 1000 (ml)	1 or	E3.17
	Yes AND 571 (ml) OR Yes AND 500 (ml) OR Yes AND 858 (ml) AND 1000 (ml) OR Yes AND 0.5 (litres) Accept equivalents in litres. Working must be shown in consistent units.	2	E3.17

Pearson Edexcel Functional Skills – Entry 3

Mathematics

Entry 3
Section B – Calculator

Sample Entry 3 controlled assessment materials for first teaching September 2019

Time: 75 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 27.

Advice

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

Turn over ▶

Pearson

1 Riya and her friends want to rent a flat.

They want the flat to be lower than the 5th floor.

They want a flat that costs between £875 and £925 per month.

Riya finds information about flats to rent.

Which flat do they choose? (1)

Tick (✓) the correct answer.

Flat A
6th floor
Rent £919

( )

Flat B
3rd floor
Rent £895

( )

Flat C
4th floor
Rent £935

( )

Flat D
2nd floor
Rent £867

( )

Flat E
7th floor
Rent £900

Flat F
1st floor
Rent £870

( )   ( )

Question	Answer	Mark(s)	Content
1	Indicates (Flat) B OR 3(rd floor) OR (£)895 and no other	1	E3.1

2   Riya and her friends want to rent a flat with parking.

In their town, 3 of the 15 flats have parking.

Which fraction is equal to $\dfrac{3}{15}$ **?**   (1)

Tick (✓) the correct answer.

$$\frac{3}{5} \qquad \frac{15}{100} \qquad \frac{1}{5} \qquad \frac{1}{3}$$

( )   ( )   ( )   ( )

Question	Answer	Mark(s)	Content
2	Indicates $\frac{1}{5}$ and no other fraction	1	E3.7

3   Riya wants to see a flat between 5:30 pm and 6 pm.

She chooses a time to see the flat.

When will Riya see the flat?   **(1)**

Tick (✓) the correct answer.

1 6 : 4 0	1 5 : 4 0
( )	( )

1 7 : 4 0	0 5 : 4 0
( )	( )

1 8 : 4 0	0 6 : 4 0
( )	( )

Question	Answer	Mark(s)	Content
3	Indicates 17:40 and no other	1	E3.13

The Examiner explains
Accept any clear indication for example:
• tick
• cross
• underline
• circling
• highlighting

4   Riya needs to hire a van to move into her new flat.

Cost of van hire for one day (£)					
Size of van	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**
small	73	65	73	61	85
medium	80	74	80	72	92
large	85	81	85	79	99

Riya wants to move before Thursday.

She wants to hire the largest van she can.

She wants to pay less than £75.

What is the cost of the van Riya hires?   **(1)**
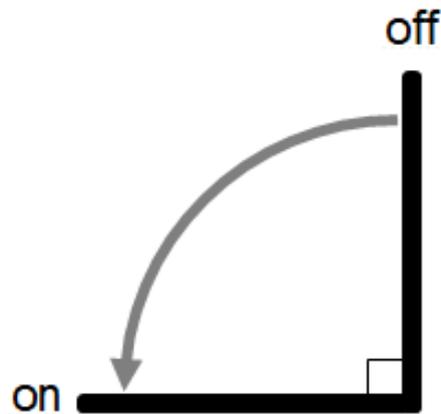
Show your answer in the box below.

The Examiner explains
The candidate needs to extract information from a table

£ _____

Question	Answer	Mark(s)	Content
4	Indicates (£)74 and no other	1	E3.21

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

5 The diagram shows how to turn on the water tap in the flat.

off

on

Riya turns the tap on.

What fraction does she turn the tap? (1)

Show your answer in the box below.

The Examiner explains
The candidate needs to recognise simple fractions

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

Question	Answer	Mark(s)	Content
5	$\frac{1}{4}$ (turn) or equivalent fraction Accept in words, e.g. one quarter	1	E3.20

The Examiner explains
Accept any understandable spelling

6 A water meter shows how many units of water Riya and her friends use.

Riya reads the meter when they move in.

She reads the meter again after one month.

when they move in	after one month
789	820
units	units

How many units of water did the friends use in one month? (2)

Show your working and your answer in the box below.

The Examiner explains
The candidate needs to subtract a three-digit number.

The Examiner explains
Candidates can use any valid method to work out their answer

Question	Answer	Mark(s)	Content
6	Valid process to find the difference, e.g. 820 – 789	1 or	E3.2
	31 (units)	2	E3.2

7 a) Round 789 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 6 (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

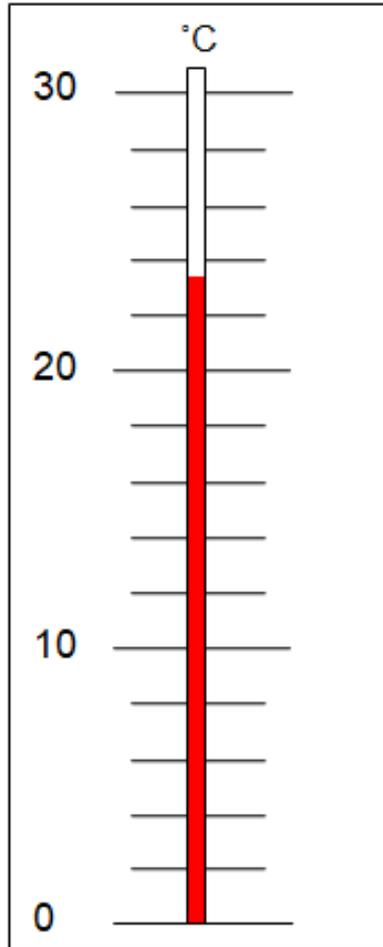| Question	Answer	Mark(s)	Content
7a	790	1	E3.5
7b	Correct answer for the check, i.e. (820 − 790 =) 30 (790 + 31 =) 821 Award this mark for a correct answer based on an incorrect rounding of 789	1	E3.5

> **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

8   Riya looks at the temperature in the kitchen.

kitchen

What is the temperature in the kitchen to the nearest division?

(1)

Show your answer in the box below.

The Examiner explains
The candidate needs to read temperature to the nearest division
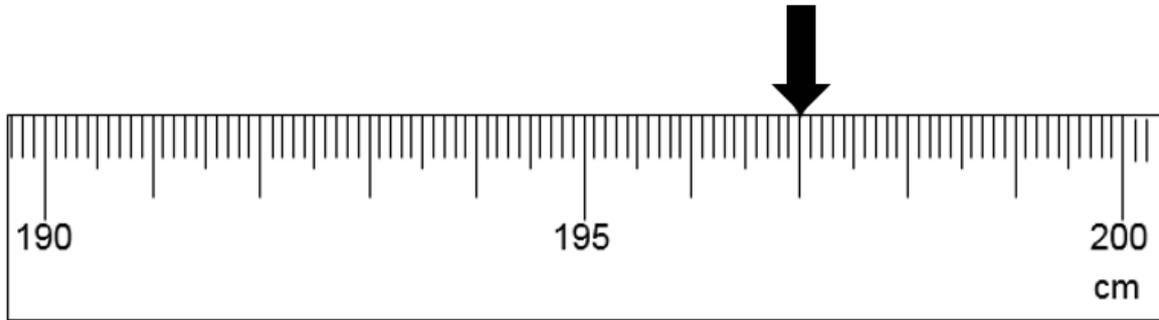
_____°C

Question	Answer	Mark(s)	Content
8	24 (°C) Exact answer required in figures or in words	1	E3.14

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

9 Riya wants to put a cupboard and a table in the living room.

The arrow on the scale shows the width of a space in the living room.

The width of the cupboard is 1 m.
The width of the table is 84 cm.

Will the cupboard and table fit in the s

(3)

Show why you think this.

☐

Show your working and your answer in the box below.

Tick (✔) the correct answer.

Yes ( )   No ( )

Question	Answer	Mark(s)	Content
9	Correct width i.e. 197 (cm) OR Valid process to compare the widths using incorrect value for width of the space, e.g. 196 – 100 OR 196 AND 100 + 84 Valid process to compare width of space and total width of cupboard and table, e.g. 197 − 100 OR 197 − 84 AND 100 OR 197 AND 100 + 84 Yes AND 97 (cm) OR Yes AND 113 (cm) AND 100 OR Yes AND 197 (cm) and 184 (cm) OR Yes AND 13 (cm difference)	1 or 2 or 3	E3.14 E3.15 E3.15

10 Riya wants to buy a bookshelf to fit under a window

The bottom of the window is 1.43 m from the floor.

Riya buys the tallest bookshelf that will fit.

Which bookshelf does Riya buy? (1)

Tick (✔) the correct answer.

Bookshelf heights

1.3 m

( )

1.39 m

( )

1.35 m

( )

1.62 m

( )

0.95 m

1.4 m

(   )   (   )

Question	Answer	Mark(s)	Content
10	Indicates 1.4 (m) and no other	1	E3.8

The Examiner explains
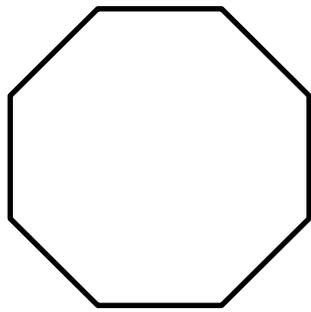
Accept any clear indication, for example:
- tick
- cross
- underline
- circling
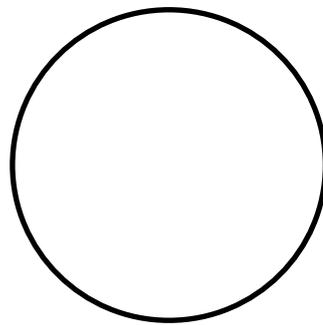- highlighting

11   Riya wants to buy a mirror.

These are the shapes of some mirrors.

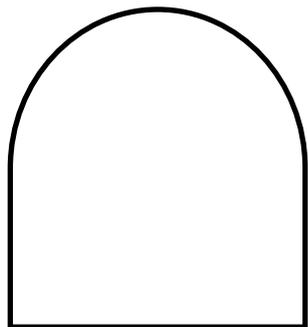**Which one of these shapes has only one line of symmetry?**   (1)
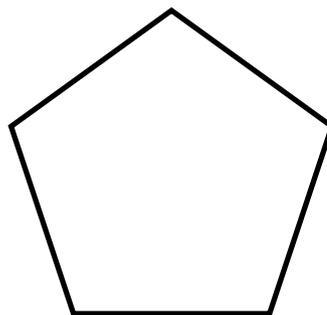
Tick (✓) the correct shape.

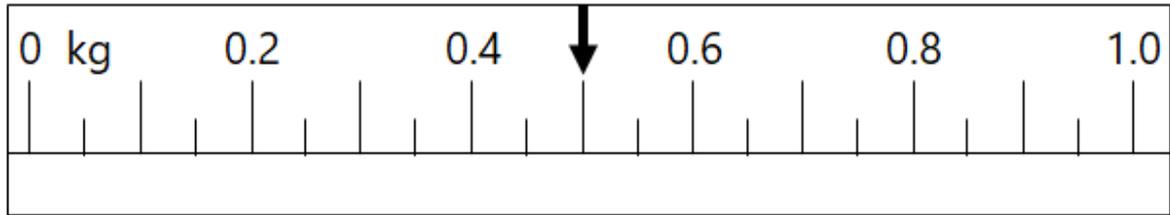( )   ( )

( )   ( )

Question	Answer	Mark(s)	Content
11	Indicates correct shape and no other shape, i.e. ⌒ Accept one line of symmetry drawn on the correct shape	1	E3.19

12 Riya needs a hook to hang a picture on a wall.

She weighs the picture.

0 kg	0.2	0.4	↓	0.6	0.8	1.0

The labels show the heaviest weight each hook can hold.

225 g	450 g	675 g	950 g
A	**B**	**C**	**D**
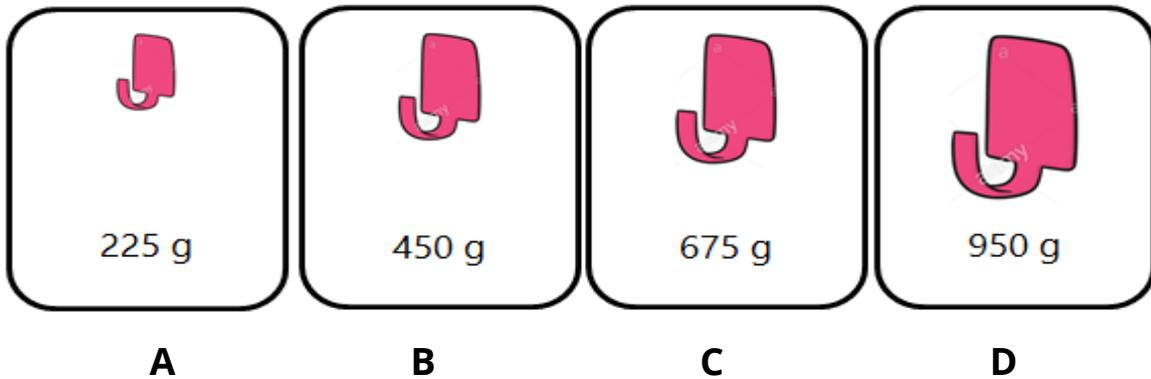
Riya buys the smallest hook that will hold the picture.

Which hook does Riya buy?

Show why you think this.

> **The Examiner explains**
> Working is essential in this type of question requiring a decision
> Candidates must show working with their answer to their decision.

(2)

Show your working and your answer in the box below.

> **The Examiner explains**
> The candidate needs to read the question carefully to ensure they read the scale correctly AND select a suitable hook to hold the picture

Question	Answer	Mark(s)	Content
12	Indicates (hook) C only OR 675(g) only OR 0.5 (kg) OR 500 (g)	1 or	E3.14
	(Hook) C only AND 500 (g) OR (Hook) C only AND 0.5 (kg) AND 0.675 (kg) OR 675 (g) only AND 500 (g)	2	E3.16

13 Riya wants curtains in her room.

These are the lengths of curtains in metres.

1.0 m   1.25 m   1.5 m

The lengths follow a pattern.

Riya wants the next length up from 1.5 m.

What length of curtains will Riya buy? (1)

Show your answer in the box below.

The Examiner explains
The candidate needs to sequence decimals

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

_____ m

Question	Answer	Mark(s)	Content
13	1.75 (m)	1	E3.9

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

14 Riya and her friends pay bills each month.

Type of bill: Energy
Date: 18th of the month
Amount: £55

Type of bill: Water
Date: 10th of the month
Amount: £19

Type of bill: Internet
Date: 21st of the month
Amount: £27

Riya wants to show this information in a table.

Organise this information in a table. (1)
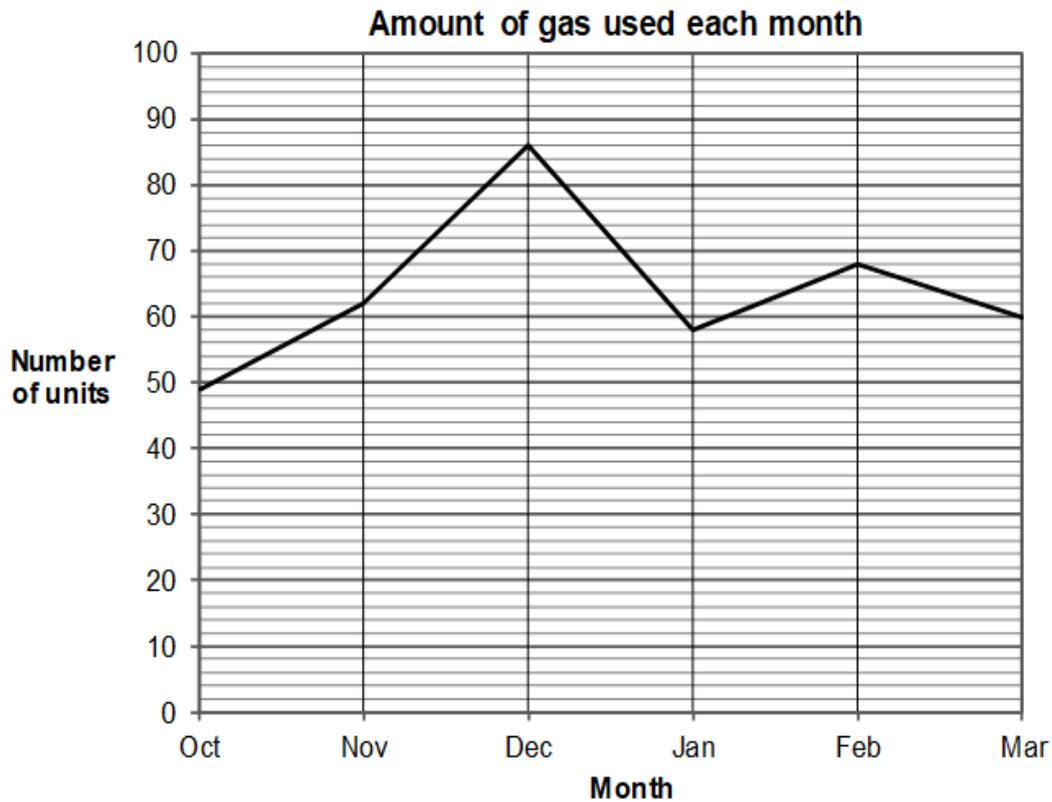
Show your answer in the box below.

Question	Answer	Mark(s)	Content
14	Designs a table structure with suitable column headings, e.g. 'Type of bill', 'Date' and 'Amount (in £)' and correct values, e.g. (Bills) | Type of bill	Date	Amount	 | Energy	18(th)	£55	 | Water	10(th)	£19	 | Internet	21(st)	£27	 Data headings may be shown in a row or a column. Each data row/column must include correct values but may appear in any order as long as they correspond to the correct data headings. £ sign may be seen in data heading instead of with each amount. Accept table without borders.	1	E3.23

15 Riya sees this graph on a gas bill.

Amount of gas used each month

Riya says the total amount of gas used in November and December was more than 150 units.

Is Riya correct?

The Examiner explains
Working is essential in this type of question requiring a decision Candidates must show working with their answer to their decision

Show why you think this. (3)

Show your answer in the box below.

The Examiner explains
The candidate needs to obtain the information from the simple line graph and make a comparison with the given amount

The Examiner explains
Prompts the candidate to give a decision

Tick (✓) the correct answer.

Question	Answer	Mark(s)	Content
15	Correct values from chart, i.e. 62 AND 86 OR Valid process to make comparison using 1 correct value from chart, e.g. 150 − 62 − 83	1 or	E3.22
	Valid process to make comparison using both correct values from chart, e.g. 62 + 86 (= 148) 150 − 62 − 86 (= 2)	2 or	E3.22
	No AND 148 (units) OR No AND 2 (units less)	3	E3.22

16 Riya has a total of £60 to spend on food.

She spends £36.70

How much money does Riya have left to spend?

Use correct money format. (3)

Show your working and your answer in the box below.

The Examiner explains
Candidates can use any appropriate method to work out their answer

Question	Answer	Mark(s)	Content
16	Valid process to find the difference, e.g. 60(.00) − 36.7(0)	1 or	E3.10
	(£)23.3(0)	2	E3.10

	Correct £ symbol and money notation used i.e. two decimal places, not £23.30p	1	E3.10

...ding in a table.

Type of spending	Money spent
bills	£ 260
going out	£140
rent	£ 300

The chart shows the monthly spending.

Complete the chart and use correct labels.

(1)

Monthly spending

The Examiner explains
The candidates needs to show each bar value clearly

Money spent (£)

300

200

100

0

The Examiner explains
Encourage candidates to use a ruler to draw bars

The Examiner explains
Encourage learners to clearly label each bar

Type of spending

Question	Answer	Mark(s)	Content
17	Draws correct bars with labels to show £300 for rent, £260 for bills, and £140 for going out, in any order Accept clear points or lines indicating the correct values	1	E3.23

18 Riya counts the different activities she does each month.

These are the results.

cinema	party	shopping	dancing	cinema
gym	shopping	cinema	gym	dancing
dancing	dancing	gym	dancing	gym
party	gym	dancing	shopping	shopping

Complete the frequency table for the results. (1)

Frequency table	
Activity	**Frequency**
party	2
cinema	3
shopping	4
gym	
dancing	6

Question	Answer	Mark(s)	Content
18	5	1	E3.21