

Non-calculator Questions

NCFE

1.a)

Rishi has a list of the number of tents at the festival each year.

Year	Number of tents
2017	153
2018	169
2019	268
2020	332

How many tents were there in total in these four years?

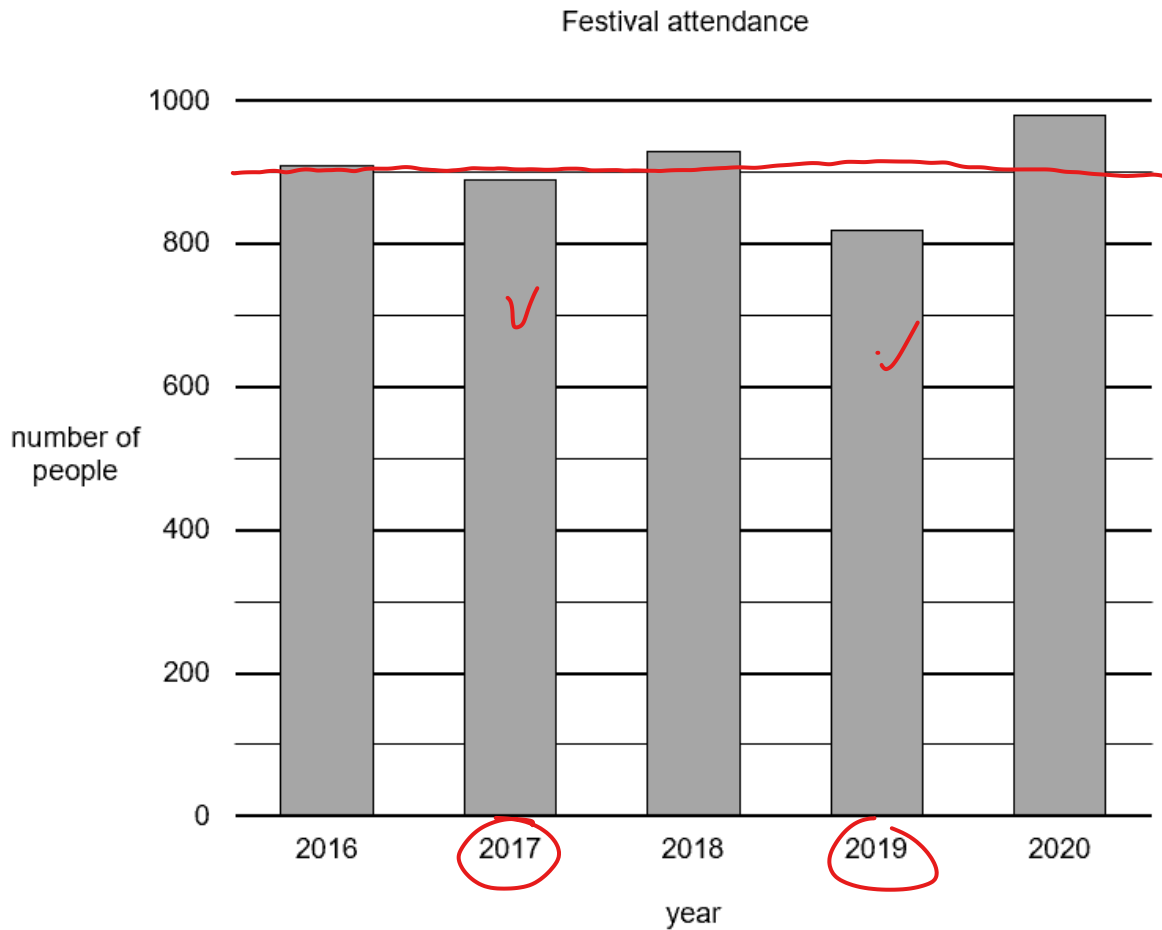
Show your working.

[2 marks]

$$\begin{array}{r} 153 \\ + 169 \\ \hline 322 \end{array} \quad \begin{array}{r} 268 \\ + 332 \\ \hline 600 \end{array} \quad \begin{array}{r} 600 \\ + 322 \\ \hline 922 \end{array}$$

b)

Rishi has a bar chart that shows the number of people who attended the festival in these years.



In which years did fewer than 900 people attend the festival?

[2 marks]



2017 and 2019

City & Guilds

2. A supervisor counts the number of departures from an airport in one morning.

These are the results.

Glasgow	Cardiff	Cardiff	Paris	Glasgow
Madrid	Belfast	Paris	Glasgow	Cardiff
Glasgow	Glasgow	Belfast	Cardiff	Madrid
Belfast	Paris	Cardiff	Paris	Glasgow
Madrid	Belfast	Glasgow	Madrid	Belfast
Paris	Glasgow	Belfast	Cardiff	Cardiff

Airport	Frequency
Belfast	6
Cardiff	7
Glasgow	8
Madrid	4
Paris	5

Complete the frequency table.

1 mark

3. An organiser keeps a record of the different types of community events that took place over the summer.

She started to put this information into a frequency table to report at a meeting.

Fun Fair	Marathon	Quiz	Marathon	Fun Fair
Quiz	Street Party	Fun Fair	Quiz	Quiz
Talent Show	Marathon	Street Party	Talent Show	Marathon
Fun Fair	Talent Show	Quiz	Fun Fair	Fun Fair
Street Party	Marathon	Talent Show	Quiz	Fun Fair

Community Event	Frequency
Fun Fair	7
Marathon	5
Street Party	3
Quiz	6
Talent Show	4

Complete the frequency table.

1 mark

4.

A farmer makes a note of the weights of his new-born lambs.

These are the results.

2kg	4kg	4kg	3kg
2kg	3kg	5kg	3kg
4kg	3kg	3kg	4kg
3kg	2kg	5kg	3kg
5kg	4kg	3kg	2kg
4kg	3kg	5kg	3kg

Weight	Frequency
2kg	4
3kg	10
4kg	6
5kg	4

Complete the frequency table.

1 mark

Calculator Questions

Edexcel

1.

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)

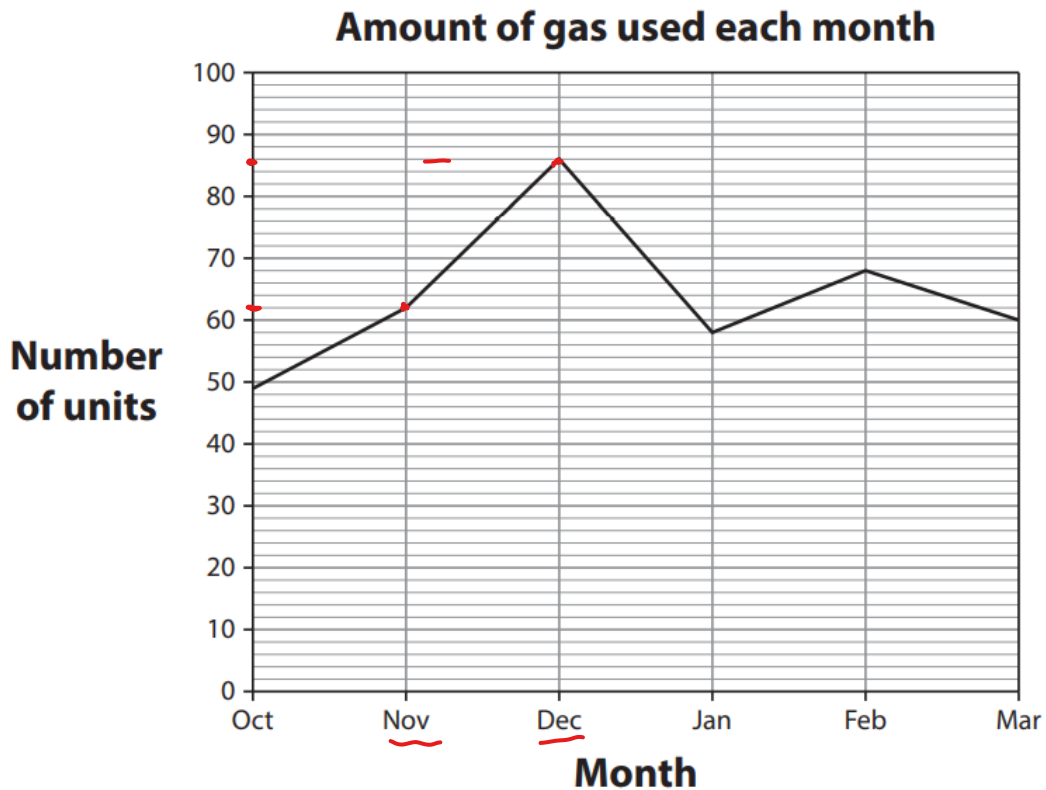
Show your answer in the box below.

Medium van on Tuesday

£ 74

2.

Riya sees this graph on a gas bill.



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

Is Riya correct?

Show why you think this.

(3)

Show your working and your answer in the box below.

$$62 + 86 = 148$$

Tick (✓) the correct answer.

Yes () No (✓)

3.

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

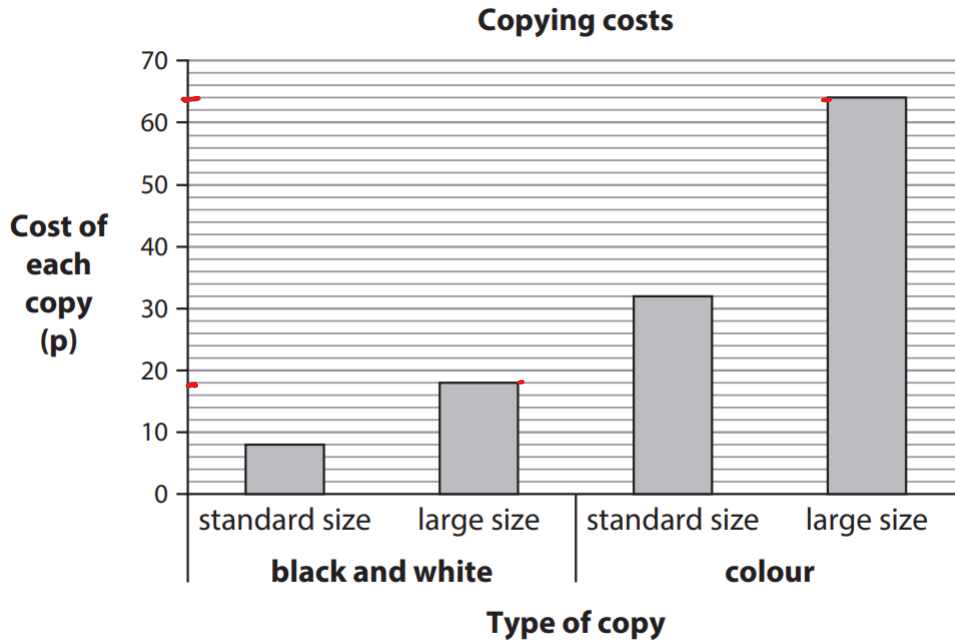
Complete the frequency table for the results.

(1)

Frequency table	
Activity	Frequency
party	2
shopping	4
cinema	3
gym	5
dancing	6

4.

The chart shows the costs of copying documents.



A customer wants a large size copy.

Bret says a large size colour copy costs 48p more than a large size black and white copy.

Is Bret correct?

Show why you think this.

(3)

Show your working and your answer here.

$$64 - 18 = 46$$

Tick (✓) the correct answer.

Yes () No (✓)

5.

Bret sends parcels to customers.

He has a list of the heights and weights of the parcels.

Height and weight of parcels	
27 cm	11 kg
•21 cm	17 kg
•24 cm	7 kg
30 cm	15 kg
25 cm	12 kg
•22 cm	16 kg
•14 cm	6 kg

It costs £5 to send a parcel of height less than 25 cm and weight less than 15 kg.

Which is the heaviest parcel that Bret can send for £5?

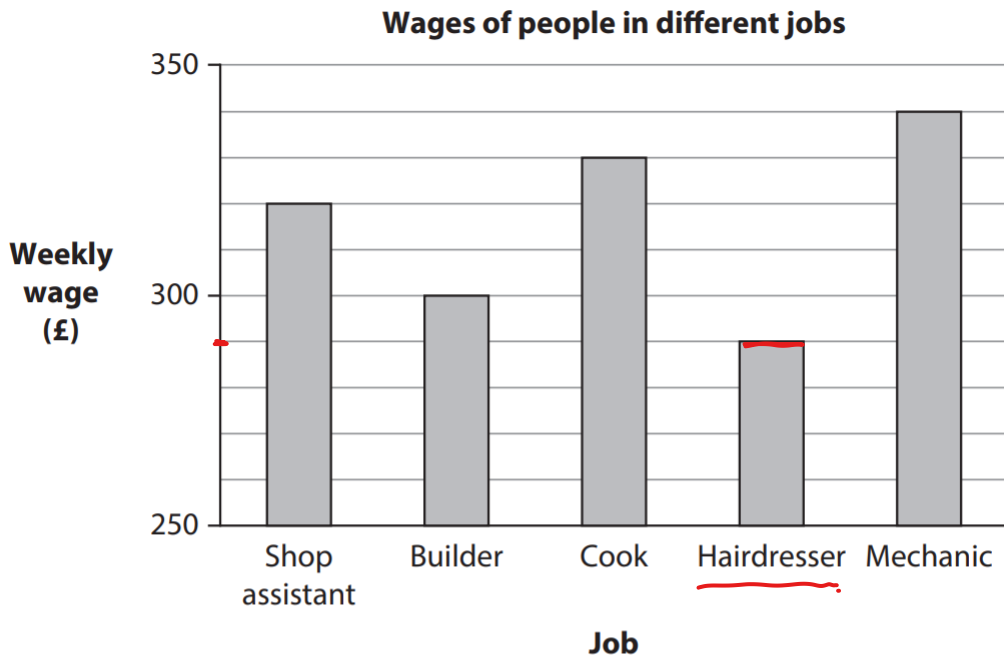
(1)

Show your answer here.

7 kg

6.

The chart shows the weekly wages of people in different jobs.



Bret is paid a wage of £330 each week.

How much more is Bret paid each week than a person with the least wage?

(1)

Show your answer here.

$$\begin{array}{r}
 330 \\
 - 290 \\
 \hline
 40
 \end{array}$$

£ 40

NCFE

7.

Debra looks at film reviews.

Each film is rated 1, 2, 3, 4 or 5 stars.

These are the ratings.

1	4	4	5	3	1	4	2	4	2
2	1	3	5	3	3	5	1	3	4
3	4	3	4	4	5	3	5	2	4

Complete the frequency table to show this information.

[2 marks]

Rating	Frequency
1 star	4
2 stars	4
3 stars	8
4 stars	9
5 stars	5

8.

Students choose college activities.

football	dance	dance	rugby
singing	dance	football	singing
football	dance	football	football
dance	dance	dance	singing

Complete the frequency table to show the numbers of activities.

[2 marks]

Activity	Frequency
football	5
dance	7
singing	3
rugby	1

9.

The restaurant manager has a list of how many students eat lunch there each day.

Day	Number of students
Monday	253
Tuesday	325
Wednesday	523
Thursday	235
Friday	352

What is the lowest number of students?

[1 mark]

235

10.

Jamie writes down the food items he sells.

Friday	Saturday	Sunday
doughnut	veggie burger	chips
veggie burger	veggie burger	chips
chips	chips	salad
salad	doughnut	chips
salad	veggie burger	doughnut
doughnut	chips	veggie burger
chips	chips	veggie burger
veggie burger	veggie burger	chips
chips	doughnut	veggie burger
chips	chips	doughnut
veggie burger	salad	doughnut
doughnut	veggie burger	chips
		veggie burger
		chips
		veggie burger

Complete the frequency table to show this information.

[2 marks]

Food item	Frequency
doughnut	8
veggie burger	13
chips	14
salad	4

City & Guilds

11.

An airport café displays this menu.

A customer asks for two cups of coffee, soup and a roll and chicken pie.

She pays with a £20 note

The Airport Café									
<table border="1"> <thead> <tr> <th colspan="2">Starters</th> </tr> </thead> <tbody> <tr> <td>Cheese salad</td> <td>£4.55</td> </tr> <tr> <td><u>Soup and roll</u></td> <td><u>£3.25</u></td> </tr> <tr> <td>Chips</td> <td>£1.25</td> </tr> </tbody> </table>		Starters		Cheese salad	£4.55	<u>Soup and roll</u>	<u>£3.25</u>	Chips	£1.25
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Water	99p								
Tea	£3.60								
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How much change will she get?

Show your working out

$$\begin{array}{r}
 2 \times 4.49 = 8.98 \\
 + 3.25 \\
 4.49 \\
 \hline
 16.72
 \end{array}$$

Amount of change £ 16.72

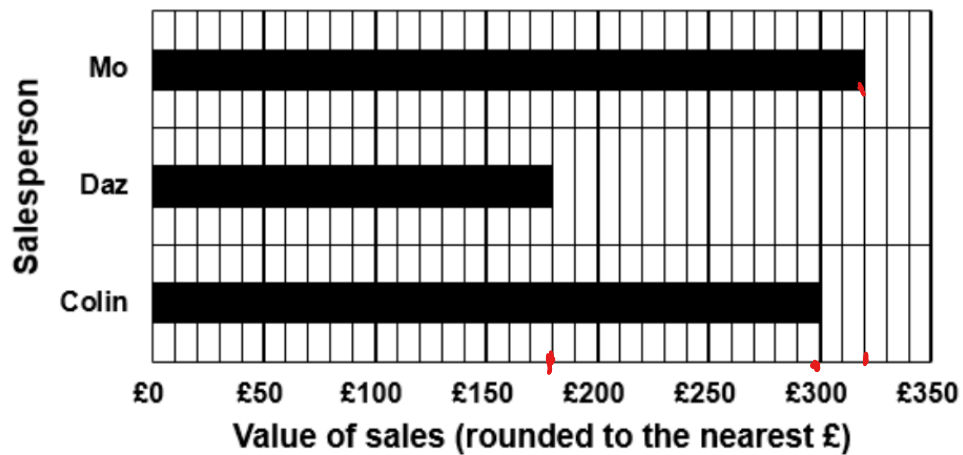
3 marks

12.

A supervisor keeps records about her team.

She worked out the value of sales each salesperson made **this morning**.

She put the information into this bar chart.



She wants to find out the total value of their sales **today**.

The table below shows the value of sales each salesperson made **this afternoon**.

Salesperson	Mo	Daz	Colin
Value of sales this afternoon (rounded to the nearest £)	£247	£259	£265

What are the total sales values for each salesperson?

Show your working out.

$$320 + 247 = 567$$

$$180 + 259 = 439$$

$$300 + 265 = 565$$

Sales person	Total (£)
Mo	567
Daz	439
Colin	565

3 marks

13.

(1 mark)

Sam manages a charity shop.

She makes a table to show when staff work.

Shifts	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Morning	Gill Aisha	Bob Sam	Juan Gill	Bob Aisha	Sam Gill	Juan Sam
Afternoon	Sam Juan	Aisha Gill	Bob Sam	Gill Juan	Juan Sam	Sam Bob

Complete the frequency table to show the number of shifts worked by each staff member.

Write your answer below.

Staff member	Frequency
Gill	5
Aisha	3
Sam	7
Juan	5
Bob	4