



Course Edexcel
Time Allowed 1hr 30 min
Score /
Percentage /100



STATISTICS EDEXCEL FOUNDATION QUESTION

1. JUNE 2024 1F QUESTION 12

The table shows information about the number of school lunches each of 30 students had in one week.

Number of school lunches	Frequency
0	2
1	5
2	11
3	7
4	4
5	1

(a) Work out the mean number of school lunches.

			(3)		



2. JUNE 2024 1FR QUESTION 4

The pictogram shows information about the numbers of different breeds of dog that Lucy saw in the park.

Labrador	
Retriever	
Cockapoo	
Bulldog	
Spaniel	
Terrier	

		_
Key:	\vdash	represents 8 dogs



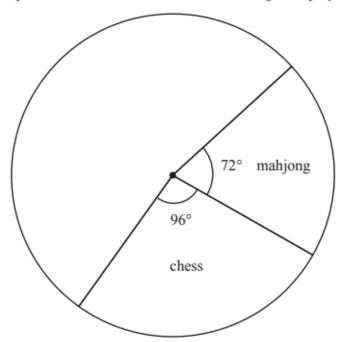
		(1)
Lucy saw 10 Spanie	-	
b) Show this inforr	nation on the pictogram.	(1)
Lucy saw more Coc	kapoos than Bulldogs in the park.	
c) How many more	?	

3. JUNE 2024 1FR QUESTION 7



At a games club, people played chess or mahjong or rummy or whist. Each person played only one of these games.

Helena starts to draw a pie chart to show information about the games played.





4.

numbers will be 11

24 people played mahjong.	
(a) Work out the number of people who played chess.	
	(2)
40 people played whist.	
(b) Work out the size of the angle on the pie chart for the sector representing You do not need to complete the pie chart.	whist.
Tou do not need to complete the pie chart.	
	(2)
JUNE 2024 1FR QUESTION 16 (3 MARKS)	(2)
Here are six cards.	
Five of the cards have a number written on them.	
16 15 3 2 9	
Work out the number that should be written on the last card so that the mean	



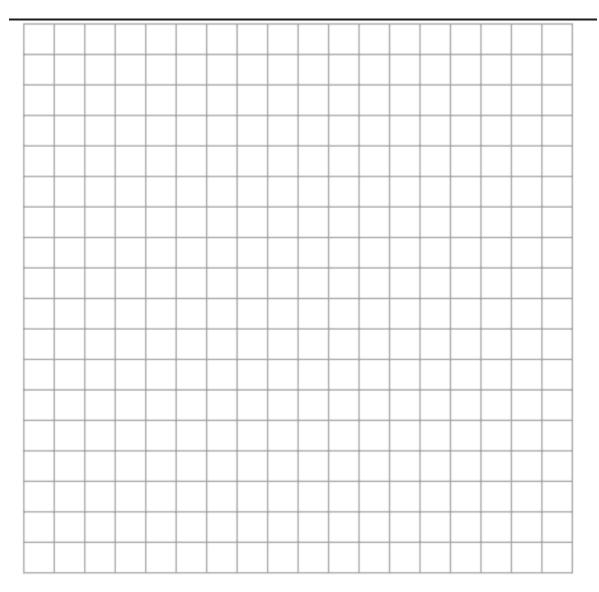
5. JUNE 2024 2F QUESTION 1 (3 MARKS)

The table shows the distance, in kilometres, each of 6 people travelled to get to a train station.

Name	Ted	Yui	Barney	Ichika	Wilfred	Bella
Distance (km)	7	12	10	5	4	9

On the grid, draw a bar chart to show this information.





6. JUNE 2024 2F QUESTION 17



	h	6	7	8	j	16	k	k	
where h, j and k are integers.									
The median o	f the eigh	nt numbe	ers is 10						
The mode of the eight numbers is 18									
The range of	the eight	numbers	is 13						

Work out the value of h, the value of j and the value of k

Here are eight numbers written in order of size

h =	
j =	

3 MARKS



	2024		

Ali uses a fitness tracker to count the number of steps he walks each day for 7

For the first 4 days, his mean number of steps is 11 800 For the next 3 days, his mean number of steps is 13 207

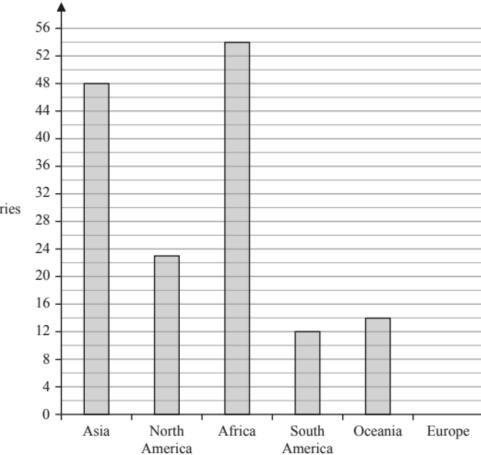
Work out his mean number of steps for the 7 days.

3 MARKS



8. JUNE 2024 2FR QUESTION 2

The bar chart gives information about the total number of countries in each of five continents.



Number of countries



The total number of countries in Europe is 44

(a)	Draw a bar on the bar chart to show this information.	(1)
(b)	Write down the name of the continent with 23 countries.	
(c)	Which continent has 4 times as many countries as South America?	(1)
(d)	Work out the sum of the total number of countries in Africa and the total number of countries in Oceania.	(1)
		(1)

9. JUNE 2024 2FR QUESTION 15

The table shows information about the number of oranges in each of 30 bags.

Number of oranges	Frequency
11	7
12	8
13	7
14	5
15	1
16	2

(a) Write down the mode of the number of oranges in a bag.

(1)



(b) Work out the mea	n number of oranges in	ı a bag.	
			(3)



10. JUNE 2023 1F QUESTION 3

Ivor asks 20 children in his class to name their favourite fruit. Here are his results.

apple	orange	grape	peach	grape
banana	apple	orange	grape	peach
apple	apple	banana	peach	orange
grape	orange	apple	orange	orange

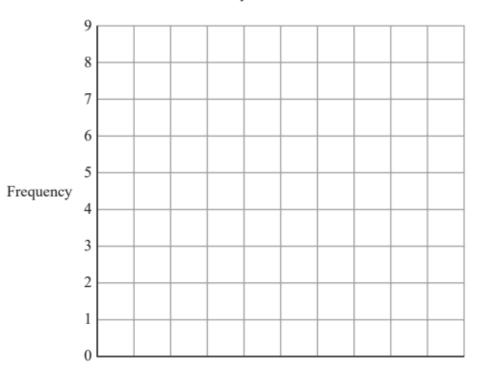
(a) Complete the frequency table to show this information.

Fruit	Tally	Frequency
apple		
banana		
grape		
peach		
orange		

(2)



(b) Complete the bar chart for the information in your table.



(3)

11. JUNE 2023 1F QUESTION 12

Pam plays netball for her school team.

Here are the numbers of goals she scored in the last 8 games.

The numbers of goals are written in order of size.

1 1 2 2 3 6 x 14

(a) Find the range of the number of goals Pam scored.

(1)

(b) Find the median number of goals Pam scored.

(1)



The mean number of goals Pam scored in the 8 games is 5

(c) Work out the value of x

$$x =$$
 (3)

12. JUNE 2023 1F QUESTION 17 (3 MARKS)

The table gives information about the number of minutes that Abby spent walking each day in September.

Number of minutes (M)	Frequency
0 < M ≤ 30	5
30 < M ≤ 60	6
60 < M ≤ 90	8
90 < <i>M</i> ≤ 120	9
120 < <i>M</i> ≤ 150	2

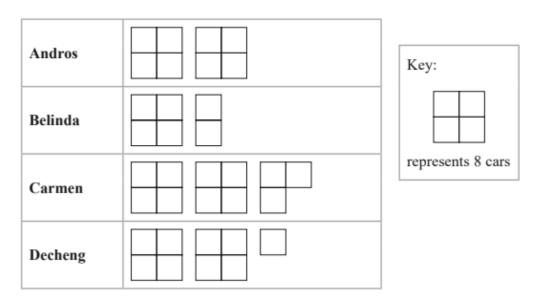
Work out an estimate for the total number of minutes that Abby spent walking in September.



	minutes
--	---------

13. JUNE 2023 1FR QUESTION 9 (4 MARKS)

The pictogram gives some information about the number of cars sold by each of the four employees of Best Cars in April.



In March, Best Cars sold 60 cars in total.

Its target for April was to sell 15% more cars in total than it sold in March.

Show that Best Cars did not meet its target.

Show your working clearly.



14. JUNE 2023 1FR QUESTION 11

The table shows how many cousins each of 30 students in Class A has.

Number of cousins	Frequency
0	3
1	7
2	6
3	11
4	1
5	2

(a) Work out the range of the number of cousins.

	 	 	 • •	 	• •	 	• •				 		 -			
								(1)						



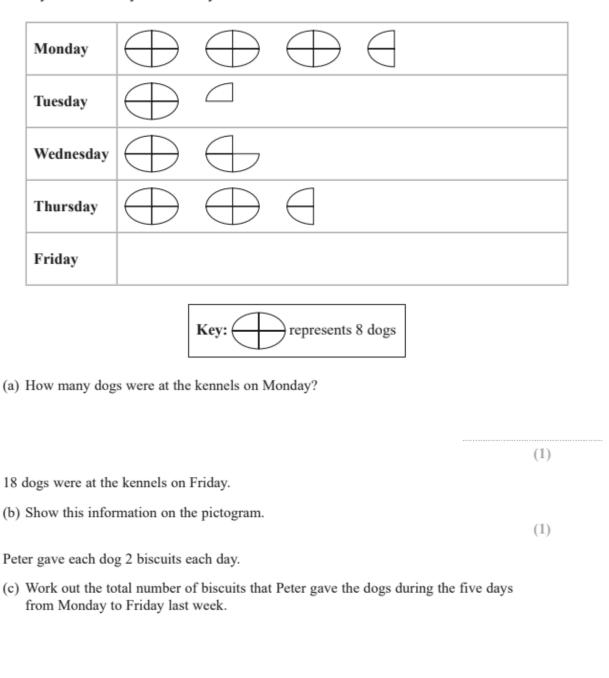
15. JUNE 2023 2F QUESTION 3

(b) Write down the mode of the number of cousins.	
	(1)
(c) Work out the mean of the number of cousins.	
	(3)



Peter owns boarding kennels for dogs.

The pictogram shows information about the number of dogs that were at the kennels each day from Monday to Thursday last week.



(2)



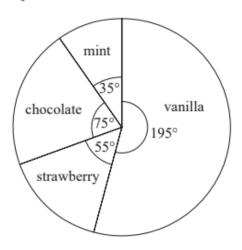
16. JUNE 2023 2F QUESTION 11

Trisha asked 90 people to name their favourite type of cheese to put on a pizza. She is going to draw a pie chart for her results.

- 55 of the 90 people said that mozzarella was their favourite.
- (a) Work out the size of the angle on the pie chart for the sector representing mozzarella.



Haashir asked a different group of people to name their favourite ice cream flavour. He used his results to draw this pie chart.



- 39 of the people Haashir asked said that vanilla was their favourite.
- (b) Work out how many of the people Haashir asked said that chocolate was their favourite.



(2)

17. JUNE 2023 2FR QUESTION 3

The table shows the mean daytime temperature for each of five planets.

Planet	Temperature (°C)
Jupiter	-160
Mars	-30
Mercury	430
Neptune	-210
Venus	470

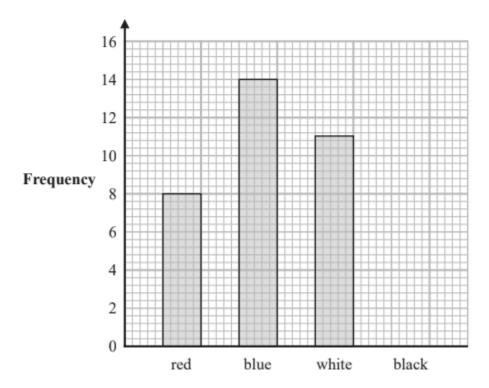
		Venus	470			
(a)	Which of these five plan	nets has the lowest m	ean daytime temperat	ure?		
(b)	Work out the difference	hatiyaan tha maan d	outima tammaratura fa	- Ivaitor and the	(1)	
(D)	Work out the difference mean daytime temperate		aytime temperature to	r Jupiter and the		
						°C
					(1)	



18. JUNE 2023 2FR QUESTION 6

Tamzin recorded the colour of each of the cars she saw one afternoon. She saw only red cars, blue cars, white cars and black cars.

The bar chart gives information about the numbers of red cars, blue cars and white cars that she saw.





(a) Write down the number of red cars that Tamzin saw.	
	(1)
Tamzin saw 40 cars in total.	
(b) Draw a bar on the bar chart to show the number of black cars that Tamzin saw.	
	(3)
19. JUNE 2023 2FR QUESTION 11 (3 MARKS)	
180 passengers travelled either to Seoul or to Tokyo. They travelled either business class or economy class.	
Of these 180 passengers	
51 travelled business class to Seoul	
69 travelled economy class to Tokyo 86 in total travelled business class	
Use this information to complete the two-way table.	

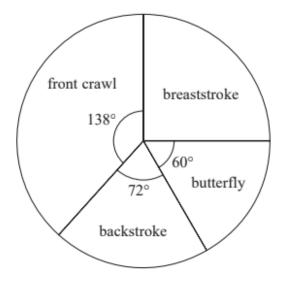
	Seoul	Tokyo	Total
Business class			
Economy class			
Total			

20. JUNE 2023 2FR QUESTION 15



Sayeeda asked the members of a swimming club which one of front crawl, breaststroke, backstroke or butterfly is their favourite stroke.

The pie chart shows some information about their answers.



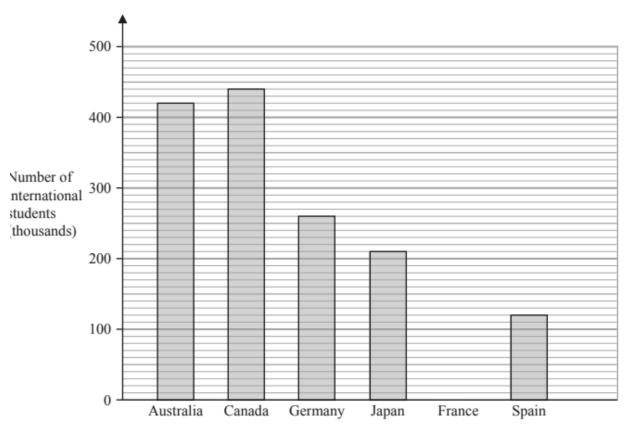
- 12 members said backstroke.
- (a) Work out the number of members who said front crawl.

						(2)					

21. OCTOBER 2023 1F QUESTION 2



The bar chart shows information about the number of international students who studied in each of five countries in 2019





students study?	
	(1)
(b) Write down the number of international students who studied in Australia.	
	thousand
	(1)
The number of international students who studied in Japan was more than the number of international students who studied in Spain.	
(c) How many more?	
	thousand
	(1)
In 2019, the number of international students who studied in France was 340 thousand.	
(d) Draw a bar on the bar chart to show this information.	
	(1)

22. OCTOBER 2023 1F QUESTION 10

The table gives information about the number of rewards gained by each of 50 students last term.

Number of rewards	Frequency
0	3
1	9
2	15
3	18
4	4
5	1



(a) Write down the mode of the number of rewards.	
	(1)
(b) Work out the mean number of rewards.	
	(3)
One of these students is chosen at random.	(0)
(c) Find the probability that this student gained more than 2 rewards.	
	(2)



23. OCTOBER 2023 2F QUESTION 2

The pictogram gives information about the number of parcels a company posted on each of four days last week.

Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Rep	resents 16 parcels	
(a) How many parcels wer	e posted on Tuesday?	
		(1)



24 parcels were posted on Friday.	
(b) Show this information on the pictogram.	(1)
More parcels were posted on Wednesday than on Monday.	
(c) How many more?	
	(1)
(d) Find the ratio	(1)
number of parcels posted on Monday: number of parcels posted on Thursday Give your answer in its simplest form.	
	(2)

24. OCTOBER 2023 2F QUESTION 17



The table shows information about the lengths, in minutes, of 50 telephone calls.

Length of telephone call (m minutes)	Frequency
0 < m ≤ 5	8
5 < m ≤ 10	2
10 < m ≤ 15	6
15 < m ≤ 20	4
20 < m ≤ 25	12
25 < m ≤ 30	18

(a) Write down the modal class.

(1)

(b) Work out an estimate for the total length, in minutes, of these telephone calls.

minutes (3)



25. JANUARY 2023 1F QUESTION 16

80 students entered a dancing competition.

The table gives information about the length of time, in minutes, for which each student spent dancing.

Time (m)	Frequency
0 < m ≤ 12	11
12 < m ≤ 24	25
24 < m ≤ 36	23
36 < m ≤ 48	15
48 < m ≤ 60	6

Work out an estimate for the mean length of time the students spent dancing.



	apple pie	fruit	ice cream	Total
Year 5	22	6		
Year 6			2	44
Total	56			80



27. JANUARY 2023 1F QUESTION 15

5 The table shows information about the frame size, in cm, of 60 bicycles sold in a shop.

Frame size (Scm)	Frequency
30 < S ≤ 36	4
36 < S ≤ 42	14
42 < <i>S</i> ≤ 48	18
48 < <i>S</i> ≤ 54	19
54 < <i>S</i> ≤ 60	5

(a) Write down the modal class.

(1)



(b) Work out an estimate for the mean frame size.

.....cm

28. JANUARY 2023 1F QUESTION 17

Here is a list of six numbers written in order of size.

x 5 y z 10 12

The numbers have

a range of 9

a median of 8

a mode of 10

Find the value of x, the value of y and the value of z



x	=						 								
y	=						 								
z	=						 								
3	Ν	1/	۱	٦ŀ	(5	•									

29. JANUARY 2023 2F QUESTION 2



The pictogram shows information about the total weight of potatoes grown last year in each of five countries.

Bangladesh		\bigoplus	\ominus		
USA		\bigoplus	\bigoplus	\bigoplus	\bigoplus
Germany		\bigoplus			
Poland	\bigoplus	\bigoplus			
France	\bigoplus	\bigcirc			
The Netherlands					

Kov.		represents 4 million tonnes of potatoes	
Kcy.	\Box	represents 4 minion tollies of potatoes	



The pictogram shows one country where the total weight of potatoes grown last year was 20 million tonnes.	
(a) Which country?	
	(1)
Last year, the weight of potatoes grown in The Netherlands was 6 million tonnes.	
(b) Show this information on the pictogram.	(1)
(c) Work out the total weight of potatoes grown in Germany and in France last year.	
	million tonnes



30. JANUARY 2023 2F QUESTION 9

There are 120 cyclists in a cycling club.

There are 67 professional cyclists and the rest are amateur cyclists.

Each of these cyclists was asked to name their favourite type of bike.

The two-way table shows some information about their answers.

	Road bike	Mountain bike	Hybrid bike	Total
Professional	26			67
Amateur		32		
Total	39	54		120

Amateur		32	
Total	39	54	120

(a)	Compl	lete	the	tabl	e
-----	-------	------	-----	------	---

(3)

(b) Work out the percentage of the cyclists who answered Mountain bike.

....% (2)



Jacob is going to draw a pie chart for the age groups of the 120 cyclists. There are 41 people in the 'over 60' age group.

	(c)	Work out	the size	of the	angle for	the sector	representing	the	'over 60'	age groun
١	$(\boldsymbol{\circ})$	WOIK Out	the Size	or uic a	angie ioi	the sector	representing	uic	OVCI OU	age group.

0	
(2)	

31. JANUARY 2023 2F QUESTION 10

The frequency table shows information about the number of cookies made by each of the 21 people in a cookery class.

Number of cookies made	Frequency
10	1
11	7
12	2
13	5
14	4
15	2

(a) Write down the mode of the number of cookies made.

	(1)	

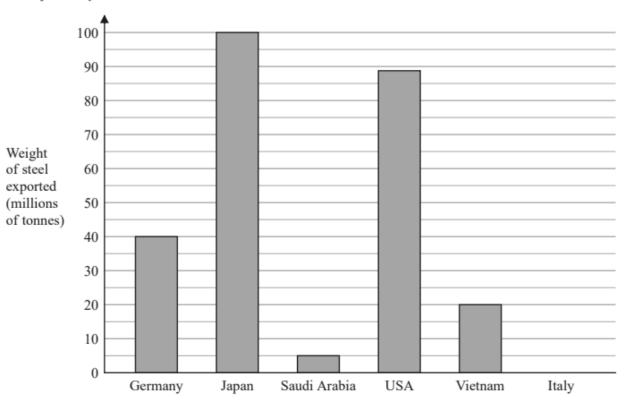


(b) Find the median number of cookies made.	
	(2)
(c) Find the total number of cookies made by the 21 people in the cookery cla	iss.
	(2)



32. JANUARY 2023 2F QUESTION 2

2 The bar chart shows information about the weight of steel, in millions of tonnes, exported by each of five countries in 2019



Using the information in the bar chart,

(a) write down the weight of steel exported by Germany,	
	million tonnes
(b) write down the country that exported 88 million tonnes of steel,	
	(1)
(a) much out the difference between the mainteenful of steel amounted by James and the	6

(c) work out the difference between the weight of steel exported by Japan and the weight of steel exported by Saudi Arabia.

 million	tonnes
(1)	



Italy exported 25 million tonnes of steel in 2019

(d) Draw a bar on the bar chart to show this information.

(1)

33. JANUARY 2023 2FR QUESTION 22 (3 MARKS)

60 students sat a Mathematics exam.

The mean mark for the 32 students in Class A was 55 The mean mark for the 28 students in Class B was 52

Find the mean mark for all 60 students.